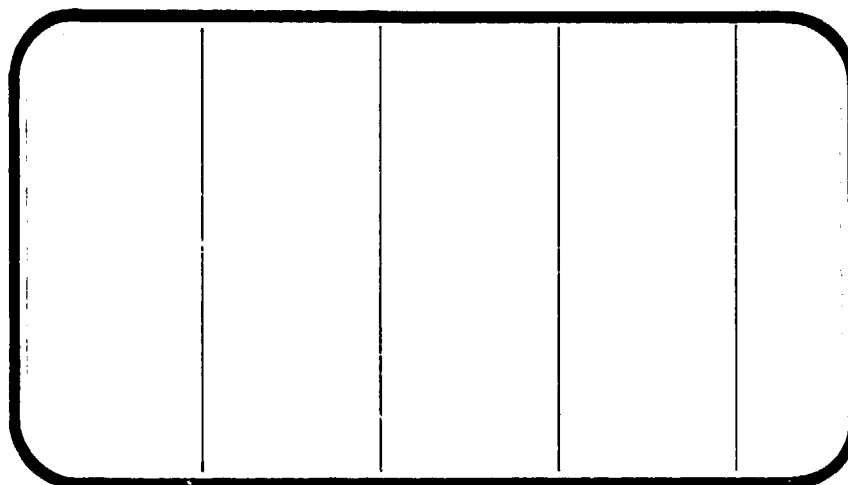




# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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(NASA-CR-141501) AIRLOADS INVESTIGATION OF  
AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE  
VEHICLE 140A/B LAUNCH CONFIGURATION (MODEL  
47-OTS) IN THE ARC 11-FOOT UNITARY PLAN WIND  
TUNNEL FOR MACH RANGE 0.6 TO 1.4 (IA14A).

N75-23663

Unclas  
G3/18 20538

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER  
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VOLUME 9 OF 11

AIRLOADS INVESTIGATION OF AN 0.030-SCALE MODEL  
OF THE SPACE SHUTTLE VEHICLE  
140A/B LAUNCH CONFIGURATION (MODEL 47-OTS)  
IN THE ARC 11-FOOT UNITARY  
PLAN WIND TUNNEL FOR MACH RANGE 0.6 TO 1.4 (1A14A)

by

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Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services  
Chrysler Corporation Space Division

for

Engineering Analysis Division

Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas

WIND TUNNEL SPECIFICS:

Test Number: ARC 11-716  
NASA Series No.: IA14A  
Model Number: 47-OTS  
Test Dates: 4 through 13 September 1973

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AIRLOADS INVESTIGATION OF AN 0.030-SCALE MODEL  
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PLAN WIND TUNNEL FOR MACH RANGE 0.6 TO 1.4 (IA14A)  
VOLUME 9

By R. L. Gillins, Rockwell International Space Division

ABSTRACT

This report presents results of tests conducted on an 0.030-scale launch configuration model of the Space Shuttle Vehicle 140A/B in the NASA/ARC 11-Foot Unitary Plan Wind Tunnel. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 1.4.

Surface pressure distributions were obtained simultaneously with six-component stability and control force data on the complete launch configuration. The configuration consisted of the orbiter, an external tank, two solid rocket boosters, and associated intercomponent attach hardware. Angles of attack and sideslip from -10 degrees to +10 degrees were investigated. The tests, designated IA14A, were conducted from 4 September 1973 through 13 September 1973.



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## INTRODUCTION

The 0.030-scale aero loads Space Shuttle Model was tested in the ARC Unitary Plan Wind Tunnels as follows:

IA14A	4 thru 13 Sept. 1973
IA14B	17 thru 19 Sept. 1973
OA22A	13 thru 14 Sept. 1973
OA22B	19 thru 20 Sept. 1973

For tests IA14B, OA22A, and OA22B, see reference 34, 35, and 36, respectively.

The testing was conducted in the 11-foot and the 9- by 7-foot tunnels of the ARC Unitary Plan Wind Tunnels. The IA14A/B tests were for the launch configurations at Mach numbers from 0.6 to 2.2. The OA22A/B tests were for the orbiter alone configuration at Mach numbers from 0.6 to 2.2. The effects of control surface deflections were also investigated in tests OA22A/B.

This report for test IA14A consists of one volume of force data and ten volumes of pressure data for a total of eleven volumes arrayed in the following manner:

Volume No.	Contents	Page
1.	IA14A force data	
2.	IA14A plotted pressure data	
3.	IA14A tabulated pressure data	
	(a) Orbiter fuselage (B)	1-725
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# NOMENCLATURE General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C <sub>p</sub>	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; $V/a$
p		pressure; N/m <sup>2</sup> , psf
q	Q(NGM) Q(PSF)	dynamic pressure; $1/2\rho V^2$ , N/m <sup>2</sup> , psf
RN/L	RN/L	unit Reynolds number: per m, per ft
V		velocity; m/sec, ft/sec
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
$\psi$	PSI	angle of yaw, degrees
$\phi$	PHI	angle of roll, degrees
$\rho$		mass density; kg/m <sup>3</sup> , slugs/ft <sup>3</sup>

## Reference & C.G. Definitions

A <sub>b</sub>		base area; m <sup>2</sup> , ft <sup>2</sup>
b	BREF	reference span; m, ft
c.g.		center of gravity
$\bar{c}$		reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m <sup>2</sup> , ft <sup>2</sup>
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

## SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
$\infty$	free stream

# NOMENCLATURE (Continued)

## Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
$C_N$	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
$C_A$	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_{A_b}$	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(P_b - P_\infty)/qS$
$C_{A_f}$	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

## Stability-Axis System

$C_L$	CL	lift coefficient; $\frac{\text{lift}}{qS}$
$C_D$	CD	drag coefficient; $\frac{\text{drag}}{qS}$
$C_{D_b}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
$C_{D_f}$	CDF	forebody drag coefficient; $C_D - C_{D_b}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CLL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
$L/D$	L/D	lift-to-drag ratio; $C_L/C_D$

NOMENCLATURE (Continued)  
Additions To Standard List

<u>Symbol</u>	<u>SADSAC Symbol</u>	<u>Definition</u>
$A( )$		model base area, subscript is base orifice number and identifies location
$C_{A_D}$	CAB	model base axial-force coefficient
$C_p( )$		model static pressure coefficient, subscript is orifice number, $[p( ) - p_\infty]/q$
$C_{AU}$	CA	axial-force coefficient, unadjusted
$C_{AF}$	CAF	forebody axial-force coefficient, $C_{AU}$ adjusted for base terms
ET		external tank
IV		integrated vehicle, consists of orbiter, external tank, and two solid rocket motors
$L_{REF}$	LREF	reference length, inches
MRC		moment reference center
OMS		orbital maneuvering system
$\delta_e$	ELEVON	elevon, surface deflection angle, positive deflection trailing edge down, degrees
$\delta_f$	BDFLAP	orbiter body flap deflection angle, positive deflection angle is trailing edge down, degrees
$\delta_R$	RUDDER	rudder, surface deflection angle, positive deflection trailing edge to the left, degrees
$\delta_{SB}$	SPDBRK	speed brake deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{SB} = (\delta_{RL} + \delta_{RR})/2$ , positive deflection, degrees
$i_0$	ORBINC	incidence angle between the orbiter and external tank, $i_0 = \alpha_0 - \alpha_T$ , degrees



# NOMENCLATURE (Continued)

$\beta_T$	BETAT	angle of sideslip of external tank, degrees
$\alpha_T$	ALPHAT	angle of attack of external tank, degrees
$l_B$	LB	length of orbiter body, in
$l_T$	LT	length of external tank, in
$l_S$	LS	length of SRM booster, in
$l_{NM}$	LNM	length of OMS nozzle, positive direction forward of exit plane, in
$l_{NP}$	LNP	length of MPS nozzle, positive direction forward of exit plane, in
$b/2$	BW	wing semi-span, in
$b_v$	BV	vertical tail span, in
$x$	X	distance from component nose, in
$y$	Y	lateral distance from centerline, in
$z$	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord), in
$c_w$	CW	local wing chord, in
$c_v$	CV	local vertical tail chord, in
$x/l_B$	X/LB	longitudinal position/orbiter body length
$x/l_T$	X/LT	longitudinal position/external tank length
$x/l_S$	X/LS	longitudinal position/booster length
$x/l_{NM}$	X/LNM	longitudinal position/OMS nozzle length

# NOMENCLATURE (Concluded)

$x/l_{NP}$	X/LNP	longitudinal position/MPS nozzle length
$x/c_w$	X/CW	local chordwise position/local wing chord length
$x/c_v$	X/CV	local chordwise position/local vertical tail chord length.
$\eta$	Y/BW	local spanwise position/wing semi-span
$\eta_v$	Z/BV	local spanwise position/vertical tail span
$x_{CP}/l$	XCP/L	center of pressure distance from MRC, expressed as a fraction of body length
$\beta_0$	BETA0	angle of sideslip of orbiter
$\alpha_0$	ALPHA0	angle of attack of orbiter

## CONFIGURATIONS INVESTIGATED

The 0.030-scale Aero Loads Model, 47-OTS, was configured after the Shuttle Vehicle MCR 0200 Baseline R1, as defined in drawing number VL70-000088B. The orbiter configuration was a combination of the VL70-000140A orbiter and a VL70-000140B wing and midbody, from which the 140A/B designation was derived. The basic launch configuration consisted of the orbiter, an external tank with simulated fuel and vent lines, and two solid rocket boosters, designated  $O_1$   $T_{12}$   $S_{12}$   $N_{25}$ .

Three launch configurations were tested. One was the basic configuration described above mounted on a dual balance and sting arrangement, illustrated in figure 2d. A second contained attach hardware, designated  $AT_{10}$ , mating the orbiter with the external tank and mounted on a single sting and balance in the orbiter, illustrated in figure 2b. The third utilized a similar attach hardware configuration, designated  $AT_{11}$ , which was attached to the orbiter but not to the external tank and was mounted on the same dual sting and balance arrangement as the basic configuration (figure 2c). In all three configurations, the SRB-to-ET attach hardware was simulated at the forward attach location but not at the aft attach location. Model and component general arrangements are shown in figures 2e through 2o.

Component	Description
$O_1$	140A/B orbiter minus the main propulsion system nozzles
$T_{12}$	324-inch diameter external tank with ogive nose and external fuel and vent lines
$S_{12}$	142.3-inch diameter solid rocket boosters

$N_{25}$	Nozzles for $S_{12}$ boosters
$AT_{10}$	Orbiter-to-ET attach hardware, fixed to both vehicles
$AT_{11}$	Orbiter-to-ET attach hardware, fixed to orbiter only
LV	$O_1 T_{12} S_{12} N_{25}$
LVA	$O_1 T_{12} S_{12} N_{25} AT_{10}$
LVAP	$O_1 T_{12} S_{12} N_{25} AT_{11}$

The orbiter  $O_1$ , consisted of the following components:

$B_{26} C_9 F_8 M_7 N_{28} V_8 R_5 W_{116} E_{26}$ .

$B_{26}$	Double delta wing fuselage, 140A/B
$C_9$	Canopy, 140A
$F_8$	Body flap, 140A
$M_7$	OMS pods, 140A
$N_{28}$	OMS nozzles, 140A
$V_8$	Vertical tail, 140A
$R_5$	Rudder, 140A
$W_{116}$	Double delta wing, 140B
$E_{26}$	Elevons, 140B

Parametric investigations were limited to angles of attack and side-slip with all orbiter control surfaces at  $0^\circ$  deflection.

## INSTRUMENTATION DESCRIPTION

The left side of the orbiter and the external tank and the left hand SRB were extensively instrumented with pressure orifices for measurement of surface static pressure distributions. Additionally, there were clusters of orifices around inter-component attach structure locations on the right hand side of the orbiter and external tank. The orbiter contained 471 operational orifices, of which 83 were clustered around attach structure. The external tank contained 270 operational orifices, of which 127 were clustered around attach structure. The SRB contained 124 operational orifices. A three-tube total pressure rake was installed in the opening between the orbiter and external tank. Tables and sketches defining orifice locations are included in this report. All model pressures were measured by model mounted Scanivalve, Inc., S-type scanivalve modules - twelve in the orbiter, seven in the external tank, and five in the SRB.

Force instrumentation consisted of a six-component internal force balance in both the orbiter and external tank for the LV and LVAP configurations, and a single six-component internal force balance in the orbiter for the attached LVA configuration.

## TEST FACILITY DESCRIPTION

The tests were conducted in the Ames 11- by 11-Foot Transonic Wind Tunnel which is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

## DATA REDUCTION

Data were reduced to coefficient form about body axes using the following reference constants:

$S_{REF} = 2.421 \text{ ft}^2$	reference area for force and moment coefficients
$l_{REF} = 38.709 \text{ in}$	reference length for moment coefficients
$A_1 = 0.07670 \text{ ft}^2$	Orbiter sting cavity
$A_2 = 0.21340 \text{ ft}^2$	Orbiter heat shield base
$A_3 = 0.08560 \text{ ft}^2$	Orbiter OMS base (2)
$A_4 = (\text{see table below})$	Orbiter speed brake base
$A_{501} = 0.07266 \text{ ft}^2$	Tank sting cavity
$A_{502} = 0.44264 \text{ ft}^2$	Tank base
$A_{801} = 0.19600 \text{ ft}^2$	SRM nozzle base (2)
$A_{802} = 0.16590 \text{ ft}^2$	SRM skirt base (2)
$\delta_{SB} = \begin{array}{l} 0 \\ 14.92 \\ 24.92 \\ 34.92 \\ 54.92 \\ 84.92 \end{array} \text{ deg}$	$A_4 = \begin{array}{l} 0 \\ 0.02327 \\ 0.03866 \\ 0.05370 \\ 0.08252 \\ 0.12083 \end{array} \text{ ft}^2$
$X_{MRP} = 0 \text{ in}$	
$Y_{MRP} = 0 \text{ in}$	
$Z_{MRP} = 9.99 \text{ in}$	

The incidence angle between the orbiter and the external tank is equal to zero for angle of attack and angle of sideslip. Therefore, the angle of attack, ALPHA, used in the force plots is equal to ALPHA0. Also the angle of sideslip, BETA, used in the force plots is equal to BETA0.

The force and moment data recorded by the orbiter balance for configuration LV and LVAP are identified as RB10XX datasets. Force and moment data recorded by the tank balance for configuration LV and LVAP and by the orbiter balance for LVA (composite) are identified by RB11XX.

The pressure data were recorded for each component. The fourth character in each dataset identifier (i.e. RB1BXX, B for fuselage) represents the individual component. The following list indicates the symbol for each component.

SYMBOL	COMPONENT
B	Orbiter fuselage
C	Orbiter base
E	OMS nozzle
F	Body flap
M	OMS pod outside
L	Lower wing surface
U	Upper wing surface
R	Right vertical tail surface
V	Left vertical tail surface
S	SRM booster
T	External tank
X	SRM nozzle



SYMBOL	COMPONENT
Y	External tank base & SRM booster base
1	Orbiter attach points
2	External tank attach points
3	External tank base rake

## REFERENCES

1. Orbiter - Lines and Configuration Control Drawings
2. VL70-000140A, Orbiter Configuration Control Drawing MCR 0200 Baseline
3. VL70-000143A, Lines Control, Vehicle 4 Forward Body - Cabin - Canopy MCR 0200 Baseline
4. VL70-000200, Lines Control, Midbody - Wing - Boot Fairing MCR 200 R3 dated 7-2-73
5. VL70-000145, Lines Control - Aft Body - OMS/RCS Pods, MCR 0200 - R1 baseline
6. VL70-000146A, Lines Control (Vehicle 4) Vertical Tail MCR 0200 Baseline
7. External Oxygen Hydrogen Tank (EOHT) - Lines and Configuration Control Drawings
8. VL78-000041B, External Tank - Configuration Control MCR 0200 Baseline R2
9. VL78-000024A, Structural Assy - External Tank MCR 0200 R2
10. VL78-000031A, Thermal Protection - External Tank, MCR 0200 Baseline
11. Solid Rocket Boosters (SRB) - Lines and Configuration Control Drawings
12. VL77-000036A, SRB Configuration Control MCR 0200 R1
13. VL77-000041, SRB Booster Assy, MCR 0200 R1
14. Integrated Vehicle - Lines and Configuration Control Drawings
15. VL72-000028A, Shuttle Configuration MCR 0200 Baseline R1
16. VL72-000089, SRB-ET-Orbiter Interface Disconnects MCR 0200 Baseline
17. VL72-000075, External Tank to SRB Attach Interface MCR 0074 Baseline
18. Aero Loads Model 47-OTS - Model Fabrication, Assembly and Installation Drawings

19. SS-A00119, Orbiter Assy - .030 Scale Pressure/Loads Model (140A/B Lines)
20. SS-A00120, Assy & Details - EOHT - .030 Scale Pressure/Loads Model (140A Lines)
21. SS-A00121, Orbiter/EOHT Attachments .030 Scale Pressure/Loads Model (140A Lines)
22. SS-A00122, Assy & Details - SRM - .030 Scale Pressure/Loads Model (140A Lines)
23. SS-A00123, Assy & Details - Forebody - .030 Scale Pressure/Loads Model (140A Lines)
24. SS-A00124, Assy & Details - Aft Fuselage - .030 Scale Pressure/Loads Model (140A Lines)
25. SS-A00125, Assy & Details - Wing Splice Plate & Cuff - .030 Scale Pressure/Loads Model (140A Lines)
26. SS-A00126, Assy & Details - Vertical Stabilizer - .030 Scale Pressure/Loads Model (140A Lines)
27. SS-A00127, Ames 11-ft x 11-ft Wind Tunnel Installation - .030 Scale Pressure/Loads Model (140A/B Lines)
28. SS-A00128, Ames 9-ft x 7-ft Wind Tunnel Installation - .030 Scale Pressure/Loads Model (140A/B Lines)
29. SS-A00130, Lines Control - Profile VL70-000140A - .030 Scale Pressure/Loads Model (140A/B Lines)
30. W-1104S Sting - Ames MK II 4" Balance (Male End), Ames MK XX 2.5" Balance
31. W-1105S, Sting - Ames MK II 4" Balance (Male End), RI MK I 2.75 Balance
32. W-1106A, Adapter - Ames MK II, 4" Balance (Male & Female)
33. W-1107A, 13.5" Bent Sting Adapter Ames MK II 4" Balance (Male & Female)

34. (DMS-DR-2129), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Launch Configuration (Model 47-OTS) in the ARC 9- by 7-foot Unitary Plan Wind Tunnel for Mach Range 1.55 and 2.2 (IA14B)"
35. (DMS-DR-2130), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Orbiter Configuration (Model 47-0) in the ARC 11-foot Unitary Plan Wind Tunnel for Mach Range 0.6 and 0.9 (OA22A)"
36. (DMS-DR-2131), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Orbiter Configuration (Model 47-0) in the ARC 9- by 7-foot Unitary Plan Wind Tunnel for Mach Range 1.55 and 2.2 (OA22B)"

TABLE I.

TEST : <u>1A-14A</u>		DATE : <u>9-13-73</u>	
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft.)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	$4.0 \times 10^6$	480	120
0.75	$3.75 \times 10^6$	540	120
0.85	$3.5 \times 10^6$	550	120
0.90	$3.5 \times 10^6$	580	120
0.95	$3.25 \times 10^6$	610	120
0.975	$3.0 \times 10^6$	530	120
1.00	$3.0 \times 10^6$	535	120
1.025	$3.0 \times 10^6$	540	120
1.05	$3.0 \times 10^6$	545	120
1.10	$3.0 \times 10^6$	550	120
1.15	$3.0 \times 10^6$	575	120
1.25	$2.75 \times 10^6$	540	120
1.40	$2.75 \times 10^6$	570	120

LVA: 2.5-in MK XX (ORBITER)  
 BALANCE UTILIZED: LVAP: 2.5-in MK XX (ORB.), 2.75-in MK I (ET)

	CAPACITY:		ACCURACY:		COEFFICIENT TOLERANCE:
	MK XX	MK I	MK XX	MK I	
NF	6000	7500			
SF	3000	3750	0.2%	0.2%	
AF	600	700	0.2%	0.2%	
PM					
RM	4000	4000	0.2%	0.2%	
YM					

COMMENTS: Test conditions for LVA and LVAP model configurations

TABLE I. - Concluded.

TEST : IA-14A	DATE : 9-13-73		
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	$4.0 \times 10^6$	480	120
0.75	$4.25 \times 10^6$	610	120
0.85	$4.5 \times 10^6$	710	120
0.90	$4.5 \times 10^6$	750	120
0.95	$4.5 \times 10^6$	780	120
0.975	$4.25 \times 10^6$	750	120
1.05	$4.25 \times 10^6$	790	120
1.10	$4.0 \times 10^6$	760	120
1.15	$3.75 \times 10^6$	720	120
1.25	$2.75 \times 10^6$	735	120
1.40	$3.0 \times 10^6$	620	120

BALANCE UTILIZED: 2.5-in MK XX (ORB.), 2.75-in MK I (ET)

	CAPACITY:		ACCURACY:		COEFFICIENT TOLERANCE:
	MK XX	MK I	MK XX	MK I	
NF	6000	7500	0.2%	0.2%	_____
CF	3000	3750	0.2%	0.2%	_____
AF	600	700	0.2%	0.2%	_____
PM					_____
RM	4000	4000	0.2%	0.2%	_____
YM					_____

COMMENTS: Test conditions for LV model config.

TABLE II

TEST: 17-04

DATE 13 Sept 1973

DATA SET RUN NUMBER COLLATION SUMMARY

TEST RUN NUMBERS

DATA SET IDENTIFIER	CONFIGURATION	SCHED.		CONTROL DEFLECTION			NO. OF RUNS	MAGN. MEAS. OF ALTERNATE INDEPENDENT VARIABLE				
		a	B	1	2	3		4	5	6	7	
RB1, 17	01-T12+S12+N25+ATH	3	0	0	0	0	0	0.9	0.925	1.1	1.25	
18	Y +ATH	0	0	0	0	0	0	40	93	92	89	
24	2-T12+S12+N25+ATH	10	0	0	0	0	0	10	91	91	90	
25		-8	0	0	0	0	0	10	91	91	90	
26		-6	0	0	0	0	0	10	91	91	90	
27		-4	0	0	0	0	0	10	91	91	90	
28		0	0	0	0	0	0	10	91	91	90	
29		-10	0	0	0	0	0	10	91	91	90	
30	01-T12+S12+N25+ATH	0	0	0	0	0	0	10	91	91	90	

38

39\*

D/2

CM	CL	CA	CAF	CY	CYN	CEL	67	55	45	37	75	76
$\alpha(E) = \beta(B) = -8, -4, 0, 4, 8$ $\beta(E) = -10, -10$						IDVAR (1) IDVAR (2) IDVAR (3) IDVAR (4) IDVAR (5) IDVAR (6) IDVAR (7) IDVAR (8) IDVAR (9) IDVAR (10) IDVAR (11) IDVAR (12) IDVAR (13) IDVAR (14) IDVAR (15) IDVAR (16) IDVAR (17) IDVAR (18) IDVAR (19) IDVAR (20) IDVAR (21) IDVAR (22) IDVAR (23) IDVAR (24) IDVAR (25) IDVAR (26) IDVAR (27) IDVAR (28) IDVAR (29) IDVAR (30) IDVAR (31) IDVAR (32) IDVAR (33) IDVAR (34) IDVAR (35) IDVAR (36) IDVAR (37) IDVAR (38) IDVAR (39) IDVAR (40) IDVAR (41) IDVAR (42) IDVAR (43) IDVAR (44) IDVAR (45) IDVAR (46) IDVAR (47) IDVAR (48) IDVAR (49) IDVAR (50) IDVAR (51) IDVAR (52) IDVAR (53) IDVAR (54) IDVAR (55) IDVAR (56) IDVAR (57) IDVAR (58) IDVAR (59) IDVAR (60) IDVAR (61) IDVAR (62) IDVAR (63) IDVAR (64) IDVAR (65) IDVAR (66) IDVAR (67) IDVAR (68) IDVAR (69) IDVAR (70) IDVAR (71) IDVAR (72) IDVAR (73) IDVAR (74) IDVAR (75) IDVAR (76) IDVAR (77) IDVAR (78) IDVAR (79) IDVAR (80) IDVAR (81) IDVAR (82) IDVAR (83) IDVAR (84) IDVAR (85) IDVAR 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\* FORCE DATA NOT AVAILABLE.

NASA-MSFC-WAF

TABLE II - Continued

[illegible]



TABLE II - Concluded

[illegible]

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>10</sub>GENERAL DESCRIPTION: Attach structure for Integrated Vehicle Configuration4 per VL72-000088B and VL72-000089, modified as follows: RemovedET-to-SRM aft attach struts (4) and left orbiter to right ET aftattach crossover rod.MODEL SCALE: 0.030

DRAWING NO.: SEE DESCRIPTION

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
FORWARD ATTACH		
Orbiter to Tank		
Number of struts	<u>2</u>	<u>2</u>
Diameter - In.	<u>6.000</u>	<u>0.180</u>
Location - In.		
$X_O$	<u>382.000</u>	<u>11.460</u>
$X_T$	<u>1078.000</u>	<u>32.340</u>
DRAG LINK ATTACH		
Orbiter to Tank		
Number of struts	<u>2</u>	<u>2</u>
Diameter, In.	<u>15.000</u>	<u>0.450</u>
Location, In.		
$X_O$	<u>1307.000</u>	<u>39.210</u>
$X_T$	<u>1859.000</u>	<u>55.770</u>
AFT ATTACH		
Orbiter to Tank		
Number of struts	<u>2</u>	<u>2</u>
Diameter - In.	<u>12.000</u>	<u>0.360</u>
Location - In.		
$X_O$	<u>1307.000</u>	<u>39.210</u>
$X_T$	<u>2053.000</u>	<u>61.740</u>
CROSSOVER ROD (RIGHT ORBITER TO LEFT ET)		
Diameter, In.	<u>8.000</u>	<u>0.240</u>
Location - In.		
$X_O$	<u>1307.000</u>	<u>39.210</u>
$X_T$	<u>2058.000</u>	<u>61.740</u>

TABLE III. - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT<sub>11</sub>

GENERAL DESCRIPTION: Attach structure, same as AT<sub>10</sub> except the forward  
attach struts are rotated to the vertical, and the structure extends  
from the orbiter but is not attached to the tank.

MODEL SCALE: 0.030

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
FORWARD ATTACH		
Orbiter to Tank		
Location - In.		
$X_O$	<u>382.000</u>	<u>11.460</u>
$X_T$	<u>1133.000</u>	<u>33.990</u>
Clearance, tank to strut - In.	<u>16.667</u>	<u>0.500</u>
DRAG LINK ATTACH		
Orbiter to Tank		
Clearance, tank to strut - In.	<u>8.333</u>	<u>0.250</u>
AFT ATTACH		
Orbiter to Tank		
Clearance, Tank to strut - In.	<u>8.333</u>	<u>0.250</u>
Crossover Rod		
Clearance, tank to strut - In.	<u>8.333</u>	<u>0.250</u>

TABLE III. - Continued.

MODEL COMPONENT: BODY - B<sub>26</sub>GENERAL DESCRIPTION: Orbiter Fuselage Configuration 140 A/BNOTE: B<sub>26</sub> identical to B<sub>24</sub> except underside of fuselage refaired to accept W<sub>116</sub>.Model Scale = .030DRAWING NUMBER:VL70-000193VL70-000140ADIMENSIONS:FULL-SCALEMODEL SCALELength (Body Fwd Sta X<sub>0</sub> = 238) - in.1293.338.799Max. Width (at X<sub>0</sub> = 1520) - in.262.07.860Max. Depth (at X<sub>0</sub> = 1464) - in.250.07.500

Fineness Ratio

0.263570.26357Area - ft<sup>2</sup>

Max. Cross-Sectional

340.884620.30679

Planform

Wetted

Base

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - CgGENERAL DESCRIPTION: Configuration 3AModel Scale = .030

DRAWING NUMBER

VL70-000140AVL70-000143ADIMENSION:FULL SCALEMODEL SCALELength ( $X_0=434.643$  to  $670$ )235.3577.06071Max Width ( $\phi X_0=513.127$ )152.4124.57236Max Depth ( $\phi X_0=485.0$ )25.0000.75000

Fineness Ratio

Area

Max Cross-Sectional

Planform

Wetted

Base

TABLE III. - Continued.

MODEL COMPONENT: ELEVON - E26GENERAL DESCRIPTION: Configuration 4NOTE: VL70-000400 data for (1) of (2) sides. Identical to E25 except  
airfoil thicknessModel Scale = .030

DRAWING NUMBER:

VL70-000 200  
VL70-000140 B

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area	<u>223.5814</u>	<u>0.20122</u>
Span (equivalent)	<u>368.34</u>	<u>11.05020</u>
Inb'd equivalent chord	<u>119.623</u>	<u>3.58869</u>
Outb'd equivalent chord	<u>55.1922</u>	<u>1.65577</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>-10.056</u>	<u>-10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line)	<u>851.1502</u>	<u>0.76604</u>

TABLE III. - Continued.

MODEL COMPONENT: Body Flap - F<sub>8</sub>GENERAL DESCRIPTION: Configuration 4Model Scale - .030  
DRAWING NUMBERVL70-000140B, VL70-000200

<u>DIMENSION:</u>	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length in.	<u>84.7</u>	<u>2.541</u>
Max Width in.	<u>262.308</u>	<u>7.86924</u>
Max Depth in.	<u>23.000</u>	<u><del>0.69000</del></u>
Fineness Ratio		
Area - ft <sup>2</sup>		
Max Cross-Sectional		
Planform	<u>158.85350</u>	<u>0.14297</u>
Wetted		
Base	<u>41.89642</u>	<u>0.03771</u>

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TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M7GENERAL DESCRIPTION: Configuration 3AModel Scale = .030

DRAWING NUMBER

VL70-000140AVL70-000145DIMENSION:FULL SCALEMODEL SCALELength (OMS Fwd Sta  $X_0=1233.0$ ) - IN.327.0009.810Max Width (@  $X_0=1450.0$ ) - IN.94.52.8350Max Depth (@  $X_0=1493.0$ ) - IN.109.0003.270

Fineness Ratio

Area

Max Cross-Sectional

Planform

Wetted

Base



TABLE III. - Continued.

MODEL COMPONENT: BSRM NOZZLES - N25GENERAL DESCRIPTION: Configuration 3A BSRM Nozzles

Model Scale = .030

DRAWING NO.

VL72-000132A  
VL77-000036A

## DIMENSIONS

## FULL-SCALE

## MODEL SCALE

MACH NO. \_\_\_\_\_

DIAMETER DEX ~ IN (One Nozzle)

141.34.2390

DIAMETER DT ~ IN

DIAMETER DIN ~ IN

ON ~ DEGREES

AREA - FT<sup>2</sup> (One Nozzle)

MAX CROSS-SECTIONAL

108.895950.09801

GIMBAL ORIGIN

X<sub>0</sub>Y<sub>0</sub>Z<sub>0</sub>

LEFT NOZZLE ~ IN. F.S.

1825.3-243400

RIGHT NOZZLE ~ IN. FS

1825.3+243400

NULL POSITION - DEG.

PITCHYAW

LEFT NOZZLE

+8+8

RIGHT NOZZLE

+8+8

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N28GENERAL DESCRIPTION: Configuration 3A ONS NozzleModel Scale = .030DRAWING NO. VL70-000140A

DIMENSIONS	FULL-SCALE	MODEL SCALE
MACH NO. _____		
DIAMETER DEX ~ IN (One nozzle)	_____	_____
DIAMETER DT ~ IN	_____	_____
DIAMETER DIN ~ IN	_____	_____
ON ~ DEGREES	_____	_____
AREA - Ft <sup>2</sup> (one nozzle)		
MAX CROSS-SECTIONAL	_____	_____
GIMBAL ORIGIN	<u>X<sub>o</sub></u>	<u>Y<sub>o</sub></u> <u>Z<sub>o</sub></u>
LEFT NOZZLE ~ IN.	<u>1518.0</u>	<u>-88.0</u> <u>492.0</u>
RIGHT NOZZLE ~ IN.	<u>1518.0</u>	<u>+88.0</u> <u>492.0</u>
NULL POSITION	<u>PITCH</u>	<u>YAW</u>
LEFT NOZZLE (Null Pitch 15°49'; Yaw 12°17' OUTB'D)	<u>±8°</u>	<u>13°17' OUTB'D</u> <u>2°30' INB'D</u>
RIGHT NOZZLE (Null Pitch 15°49'; Yaw 12°17' OUTB'D)	<u>±8°</u>	<u>13°17' OUTB'D</u> <u>2°17' INB'D</u>

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TABLE III. - Continued.

MODEL COMPONENT: RUDDER - R5GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell LinesVL70-000095Model Scale = .030DRAWING NUMBER: VL70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - FT <sup>2</sup>	<u>106.38</u>	<u>0.09574</u>
Span (equivalent) - IN.	<u>201.0</u>	<u>6.0300</u>
Inb'd equivalent chord	<u>91.585</u>	<u>2.74755</u>
Outb'd equivalent chord	<u>50.833</u>	<u>1.52499</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line)- FT <sup>3</sup>	<u>526.13</u>	<u>0.01420</u>
Product of Area and Mean Chord		

TABLE III. - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S<sub>12</sub>GENERAL DESCRIPTION: Configuration 3A, Data for (1) of (2) sides,  
per Rockwell Lines VL77-000036AModel Scale = .030

DRAWING NUMBER

VL72-000088A  
VL77-000036ADIMENSION:FULL SCALEMODEL SCALE

Length (Includes Nozzle) - IN.	<u>1741.0</u>	<u>52.2300</u>
Max Width (Tank Dia) - IN.	<u>142.3</u>	<u>4.2690</u>
Max Depth (Aft Shroud) - IN.	<u>192.0</u>	<u>5.7600</u>
Fineness Ratio	<u>9.06771</u>	<u>9.06771</u>
Area - FT <sup>2</sup>		
Max Cross-Sectional	<u>201.06193</u>	<u>0.18096</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>
WP of BSRM Centerline (Z <sub>T</sub> ) - IN.	<u>400</u>	<u>12.000</u>
FS of BSRM Nose (X <sub>T</sub> ) - IN.	<u>200</u>	<u>6.000</u>

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T12GENERAL DESCRIPTION: External Oxygen Hydrogen TankNOTE: Identical to T11 with external fuel lines addedModel Scale = .030

DRAWING NUMBER

VL78-000031AVL78-000041ADIMENSION:FULL SCALEMODEL SCALELength - IN. (Nose @  $X_T = 309$ )186557.629

Max Width (Dia) - IN.

3249.72

Max Depth

Fineness Ratio

5.756175.75617Area - FT<sup>2</sup>

Max Cross-sectional

572.55517.177

Planform

Wetted

Base

WP of Tank Centerline ( $X_T$ ) - IN.400.0

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL - V<sub>8</sub>GENERAL DESCRIPTION: Configuration 3A

NOTE: Similar to V5 with radius on TE upper corner and LE lower corner  
 where vertical meets fuselage.

Model Scale = .030

DRAWING NUMBER:

VL70-000140AVL70-000146ADIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) Ft <sup>2</sup>	<u>413.253</u>	<u>0.57193</u>
Planform		
Span (Theo) In	<u>315.720</u>	<u>9.47160</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.40399</u>	<u>0.40399</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.00</u>	<u>45.00</u>
Trailing Edge	<u>25.947</u>	<u>25.947</u>
0.25 Element Line	<u>41.130</u>	<u>41.1300</u>
Chords:		
Root (Theo) WP	<u>268.500</u>	<u>8.05500</u>
Tip (Theo) WP	<u>108.470</u>	<u>3.25410</u>
MAC	<u>199.80756</u>	<u>5.99423</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>43.9050</u>
W. P. of .25 MAC	<u>635.522</u>	<u>19.06566</u>
B. L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Leading Wedge Angle Deg	<u>10.00</u>	<u>10.00</u>
Trailing Wedge Angle Deg	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius (Min) - IN.	<u>2.00</u>	<u>0.060</u>
Void Area	<u>13.17</u>	<u>0.01185</u>
Blanketed Area	<u>0.00</u>	<u>0.00</u>

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TABLE III. - Concluded.

MODEL COMPONENT: WING-W<sub>116</sub>GENERAL DESCRIPTION: Configuration 4NOTE: Identical to W<sub>114</sub> except airfoil thickness. Dihedral angle is along  
trailing edge of wing.Model Scale = .030

TEST NO.

DWG. NO. VL70-000110B  
VL70-000200

DIMENSIONS:

FULL-SCALE

MODEL SCALE

## TOTAL DATA

Area (Theo.) Ft<sup>2</sup>

Planform

Span (Theo) In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees(at X<sub>0</sub>=1506.623, Y<sub>0</sub>=Incidence Angle, degrees 105, Z<sub>0</sub>= 282.75)

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

## Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

## EXPOSED DATA

Area (Theo) Ft<sup>2</sup>

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

## Chords

Root BP108

Tip 1.00  $\frac{b}{2}$ 

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{b}{2}$  = 0.425Tip  $\frac{b}{2}$  = 1.00

Data for (1) of (2) Sides

Leading Edge Cuff Ft<sup>2</sup>Planform Area Ft<sup>2</sup>

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

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TABLE IV. - ORBITER FUSELAGE PRESSURE ORIFICE LOCATIONS

ORBITER $X_0$ IN.			RADIAL LOCATION $\phi$ DEGREES																		
FULL	MODEL	$X_0/10$	0	20	40	55	70	90	105	110	120	135	140	150	151	156	162	165	169	174	180
235	7.05	0	6					8													9
245	7.35	.008	7					15			16			17							13
265	7.95	.023	10	11	12	13	14	15			25			26							27
295	8.85	.047	19	20	21	22	23	24			34			35							36
325	9.75	.070	28	29	30	31	32	33			43			44							45
380	11.40	.112	37	38	39	40	41	42													
440	13.20	.159																			
450	13.50	.167	47	48	49	50	51	52			53				57	54	58		55	46	56
465	13.95	.178																			
500	15.00	.205	59	60	61	62	63	64			65		66	67				68			69
560	16.80	.252	70		71		72	73			74			75				76			77
625	18.75	.301	78		79		80	81			82			83				84			85
725	21.75	.379	86		87		88	89			90			91				92			93
880	26.40	.499	94		95		96	97			98			99				100			101
980	29.40	.576	102		103																
1080	32.40	.653	104		105		106	107			108			109				110			111
1180	35.40	.730	112		113		114	115			116			117							118
1245	37.35	.781	119		120		121	122	123		124	125		126				127			128
1300	39.00	.823	129		130		131	132	133		134	135		136							137
1375	41.25	.882	138		139		140	141	142		143	144		145				146			
1450	42.90	.923	147		148		149	150	151		152	153		154				155			
1480	44.40	.963	156		157		158	159	160		161	162		163				164			
a 1530	45.90	1.002								165	166										
b 1530	45.90	1.002								167	168										
1555	46.65	1.021	169		170																
c 1590	47.70	1.048	171		172																
d 1590	47.70	1.048	173		174																

$X_0 = 1293.3$  full scale      a: OMS pod, inside      c: Body flap lower surface

$X_0 = 38.799$  model      b: OMS pod, outside      d: Body flap upper surface

data in datasets RBIBXX



TABLE V. - ORBITER WING PRESSURE ORIFICE LOCATIONS

ORBITER WING

ORBITER R.P.V.		X/C ~ LOCAL WING CHORD																																								
FILE	MODEL	0	0.02	0.04	0.05	0.08	0.081	0.084	0.086	0.094	0.10	0.125	0.17	0.229	0.246	0.250	0.274	0.362	0.390	0.403	0.402	0.497	0.55	0.565	0.60	0.65	0.70	0.725	0.75	0.760	0.775	0.808	0.834	0.85	0.857	0.865	0.90	0.905	0.95	0.955	0.965	
140	4.20 .299	U L	179		180			181		182			183					185							186			187					188								189	
170	5.10 .364	U L	200	201	190			191		192			193					195							196			197					198								199	
200	6.00 .427	U L	210	211	206			207		208			209					210																								
250	7.50 .554	U L	237	238	239			240		241			242					243							244			245					246				247				248	
315	9.45 .673	U L	262	263	264			265		266			267					268						269			270					271								272		
365	10.95 .780	U L	283	284	285			286		287			288					289						290			291					292								293		
415	12.45 .887	U L	300	301	302			303		304			305					306						307			308					309								310		
			308	309	310			311		312			313					314						315			316					317									318	

- 1 X/C = .19  
2 X/C = .34  
3 X/C = .03  
4 X/C = .045

data in data sets RB1LXX (lower surface and RB1UXX (upper surface)

TABLE VI. - ORBITER VERTICAL TAIL PRESSURE ORIFICE LOCATIONS

## ORBITER VERTICAL TAIL

VERTICAL $W_L \sim Z_O$			X/C_V									
FULL	MODEL	$\eta_V$		0	.025	.05	.15	.30	.52	.685	.775	.90
550	16.50	.158	RH LE LH	316		324	325	326	327	328	329	
600	18.00	.316	RH LE LH	330	317	318	319	320	321	322	323	
690	20.70	.600	RH LE LH	346	331	332	333	334	335	336	337	338
765	22.95	.840	RH LE LH	362	347	348	349	350	351	352	353	354
792	23.76	.925	RH LE LH	378	363	364	365	366	367	368	369	370
						371	372	373	374	375	376	377
						387	388	389	390	391	392	393
					379	380	381	382	383	384	385	386

data in datasets RBIVXX (left side) and RB1RXX (right side)

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TABLE VII. - ORBITER BASE, BODYFLAP, AND OMS NOZZLE PRESSURE ORIFICE LOCATIONS

ORBITER BASE

LOCATION	ORIFICE NUMBER
Orbiter Sting Cavity	1
Orbiter Base (Lower Left Corner)	2
OMS Nozzle Base	3

data in datasets RB1CXX

RUDDER FLARE BASE

RUDDER $\eta \sim Z_o$		$X/C_v$
FULL	MODEL	.75
725	18.75	4
625	21.75	5

data in datasets RB1CXX

BODY FLAP

ORBITER $\sim X_o$		$\phi \sim \text{Deg}$	
FULL	MODEL	0	40
1555	46.65	169	170
1590	47.70	173	174
		Upper	
1590	47.70	171	172
		Lower	

data in datasets RB1FXX

LEFT OMS NOZZLE SURFACE

$X \sim \text{IN. FWD.}$ NOZZLE EXIT		$\phi \sim \text{DEG.}$		
FULL	MODEL	135	180	225
10	.30	175	176	177
20	.60		178	

data in datasets RB1EXX

TABLE VIII. - EXTERNAL TANK PRESSURE ORIFICE LOCATIONS

TANK STATION ~ $X_T$			EXTERNAL TANK $\phi \sim \text{DEG.}$									
FULL SCALE	MODEL SCALE	$X_T / X_T$	0	30	60	90	120	135	150	165	180	270
309	9.27	0	503			505			513		506	507
324	9.72	.008	504	509	510	511	512		520	521	514	
400	12.00	.049	508	516	517	518	519		528	529	522	
520	15.60	.113	515	524	525	526	527		536	537	530	
640	19.20	.178	523						544	545	538	
670	20.10	.194	531	532	533	534	535		553	554	546	
710	21.30	.215	539	540	541	542	543		561	562	555	
760	22.80	.242	547	548	549	550	551	552	570	571	563	564
850	25.50	.290	556	557	558	559	560	569	578	579	572	
950	28.50	.344	565	566	567		568		587	588	580	
1050	31.30	.394	573	574	575	576	577	586	595	596	597	
1150	34.50	.451	581	582	583	584	585		604	605	606	
1250	37.50	.505	590	591	592	593	594	603	612	613	614	
1350	40.50	.558	598	599	600	601	602		621	622	623	
1500	45.00	.638	607	608	609	610	611	620	630	631	632	
1700	51.00	.746	615	616	617	618	619	629	638	639	640	
1900	57.00	.853	624	625	626	627	628	637				
2040	61.20	.928	633	634	635		636					
TANK BASE			501								502	
STING CAVITY												

$X_T = 1865 \text{ IN. FULL SCALE}$   
 $55.950 \text{ IN. MODEL SCALE}$

data in datasets RB11XX

TABLE IX. - SRM PRESSURE ORIFICE LOCATIONS

LEFT SRM

SRM STATION $\sim X_s$			$\phi \sim \text{DEG.}$							
FULL SCALE	MODEL SCALE	$\frac{X_s}{Y_s}$	0	45	90	135	180	225	270	315
200	6.00	0	805							
260	7.80	.034	806	807	808	809	810	811	812	813
370	11.10	.098	814	815	816	817	818	819	820	821
400	12.00	.115	822	823	824	825	826	827		828
450	13.50	.144	829	830	831	832	833	834	835	836
550	16.50	.201	837	838	839	840	841	842	843	844
700	21.00	.287	845		846		847	848	849	850
850	25.50	.373	851		852		853		854	
1000	31.50	.488	855		856		857			
1250	37.50	.603	858		859		860			
1450	43.50	.718	861		862		863		864	
1650	49.50	.833	865		866		867		868	
1750	52.50	.890	869	870	871	872	873	874	875	876
1796	53.88	.917	877	878	879	880	881	882	883	884
1835	55.05	.939	885	886	887	888	889	890	891	892
1868	56.04	.958	893	894	895	896	897	898	899	900
SKIRT BASE			802			803		804		
NOZZLE BASE			801							
NOZZLE EXTERNAL PRESSURES										
1850	55.50	.948	901	902	903	904	905	906	907	908
1905	57.15	.979	909	910	911	912	913	914	915	916
1928	57.84	.993	917	918	919	920	921	922	923	924

$\lambda_s = 1741 \text{ IN. FULL SCALE}$   
 $52.53 \text{ IN. MODEL SCALE}$

data in datasets RBISXX

TABLE X. - ORBITER ATTACH POINT PRESSURE ORIFICE LOCATIONS

ORBITER ATTACH POINT ORIFICE LOCATIONS																	
FULL X <sub>o</sub> SCALE	347	357	367	377	387	397	407	1252	1262	1272	1282	1292	1302	1312	1322	1332	
X <sub>o</sub> MODEL	10.41	10.71	11.01	11.31	11.61	11.91	12.21	37.56	37.86	38.16	38.46	38.76	39.06	39.36	39.96	40.26	
X <sub>o</sub> /i <sub>o</sub>	.087	.095	.102	.110	.118	.126	.133	.738	.796	.804	.811	.819	.827	.835	.850	.858	
F.S. MODEL	394	397					412				436	447		468	474	480	
Y <sub>o</sub>																	
.021 10	.50	396	399	403	407	411	415				435	446	457	467	473	479	
.043 20	.60	395	398	402	406	410	414				434	445	456	466	472	478	
.064 30	.90			401	405	409	413				433	444	455	465	471	477	
.085 40	1.20										432	443	454	464	470	476	
.107 50	1.50														469	475	
.149 69.75	2.09										431	442	453	463			
.170 79.75	2.39									424	430	441	452	462			
.192 89.75	2.69								419	423	429	440	451	461			
.213 99.75	2.99							416	418	422	428						
.23 109.75	3.29								417	421	427	439	450	460			
.256 119.75	3.59									420	426	438	449	459			
.277 129.75	3.89										425	437	448	458			

data in datasets RB11XX

TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS

X <sub>T</sub> Full Scale	1103	1093	1083	1073	1063	1053	1043	
X <sub>T</sub> Model Scale	33.09	32.79	32.49	32.19	31.89	31.59	31.29	
X <sub>T</sub> /l <sub>T</sub>	.424	.419	.413	.408	.402	.397	.391	
								Ø DEG.
FWD ATTACH POINT (ORBITER TO E-T)	684	676	668	660				182.84
	685	677	669	661				136.38
	686	678	670	662	655			189.92
	687	679	671	663	656	652		193.46
	688				657	653	651	197.0
	689	681	673	665	658	654		200.54
	690	682	674	666	659			204.08
	691	683	675	667				207.62

data in datasets RB12XX

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TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS  
(CONTINUED)

FWD DRAG LINK ATTACH POINT	$x_T$ FULL SCALE	1874	1864	1854	1844	1834	1824	1814	
	$x_T$ MODEL SCALE	56.22	55.92	55.62	55.32	55.02	54.72	54.42	
	$x_T/l_T$	.839	.834	.828	.823	.818	.812	.807	
									$\phi \sim$ DEG.
		719	713	707					222.84
		720	714	708	701				226.38
		721	715	709	702	696			229.92
		722		710	703	697	693		233.46
					704	698	694	692	237.00
						699	695		240.54
		723	718	712	706	700			244.08

data in datasets RB12XX



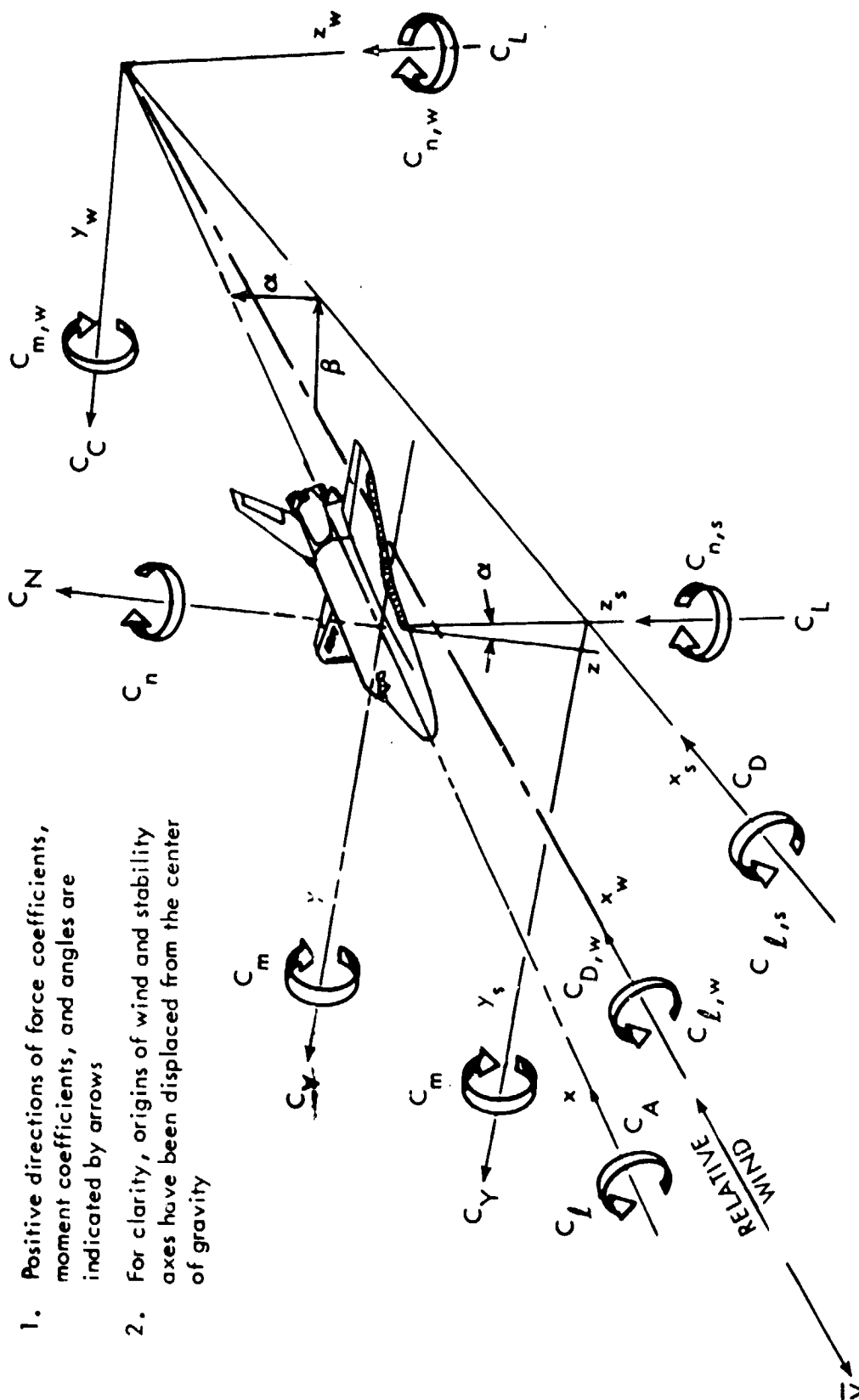
TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS  
(CONCLUDED)

AFT UPPER ATTACH	$X_T$ FULL SCALE	2078	2068	2058	2048	2038	2028	2018	
	$X_T$ MODEL SCALE	62.34	62.04	61.74	61.44	61.14	60.84	60.54	
	$X_T/\ell_T$	.948	.943	.938	.932	.927	.921	.916	
									$\phi \sim \text{DEG.}$
		777	766	754					234.04
		778	767	755	742				237.58
		779	768	756	743	732			241.12
		780	769		744	733	726		244.66
		781	770		745	734	727	724	248.2
					746	735	728		251.74
			771	759	747	736			255.28
		782	772	760					323.51
		783	773	761	748				327.05
		784	774	762	749	737			330.59
		785	775		750	738	729		334.13
		786	776		751	739	730	725	337.67
AFT LOWER ATTACH					752	740	731		341.21
				765	753	741			344.75

data in datasets RB12XX

# Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity



a. Stability and body axis systems  
Figure 1. - Axis Systems

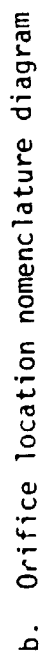
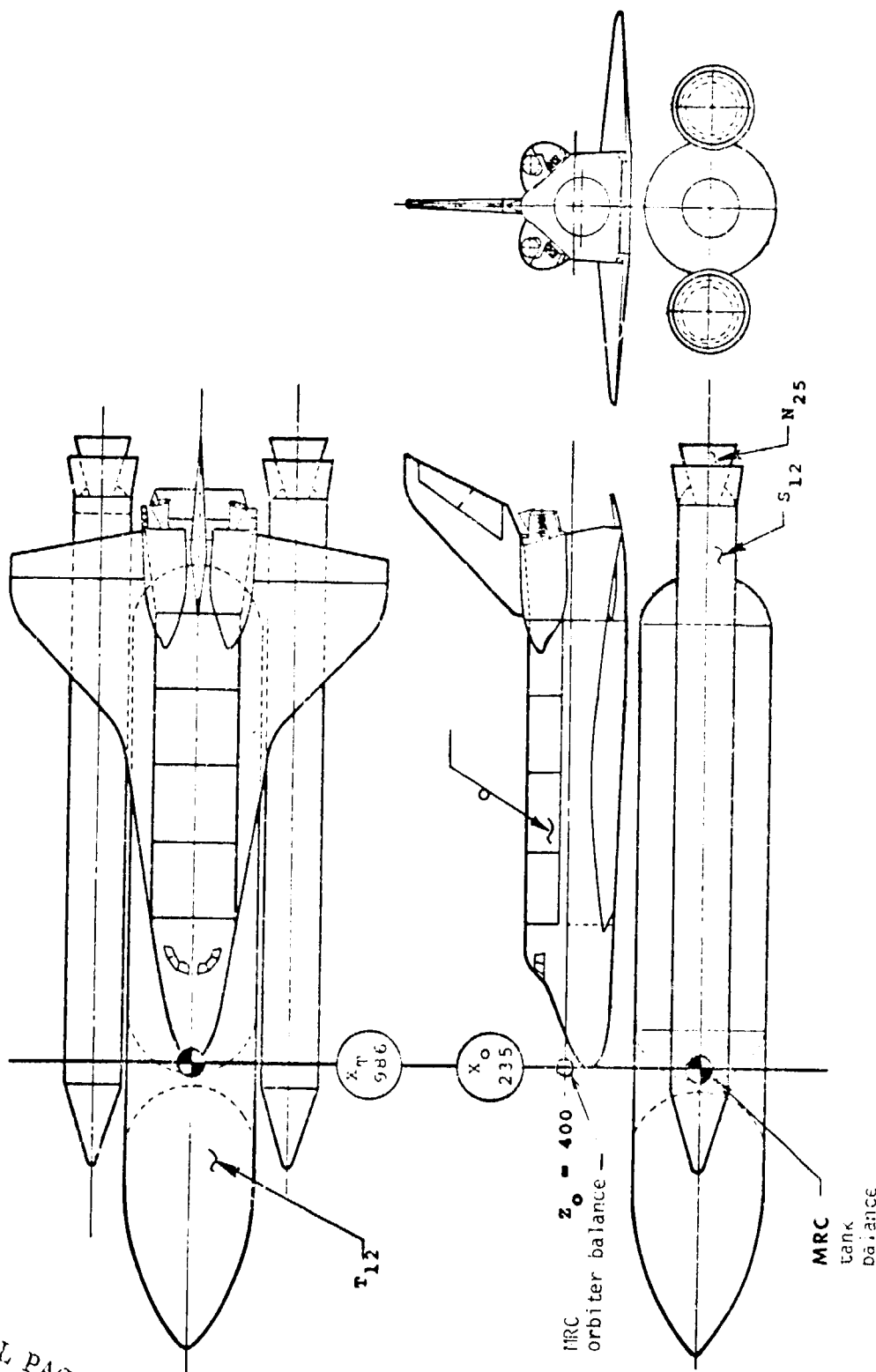


Figure 1. - Concluded

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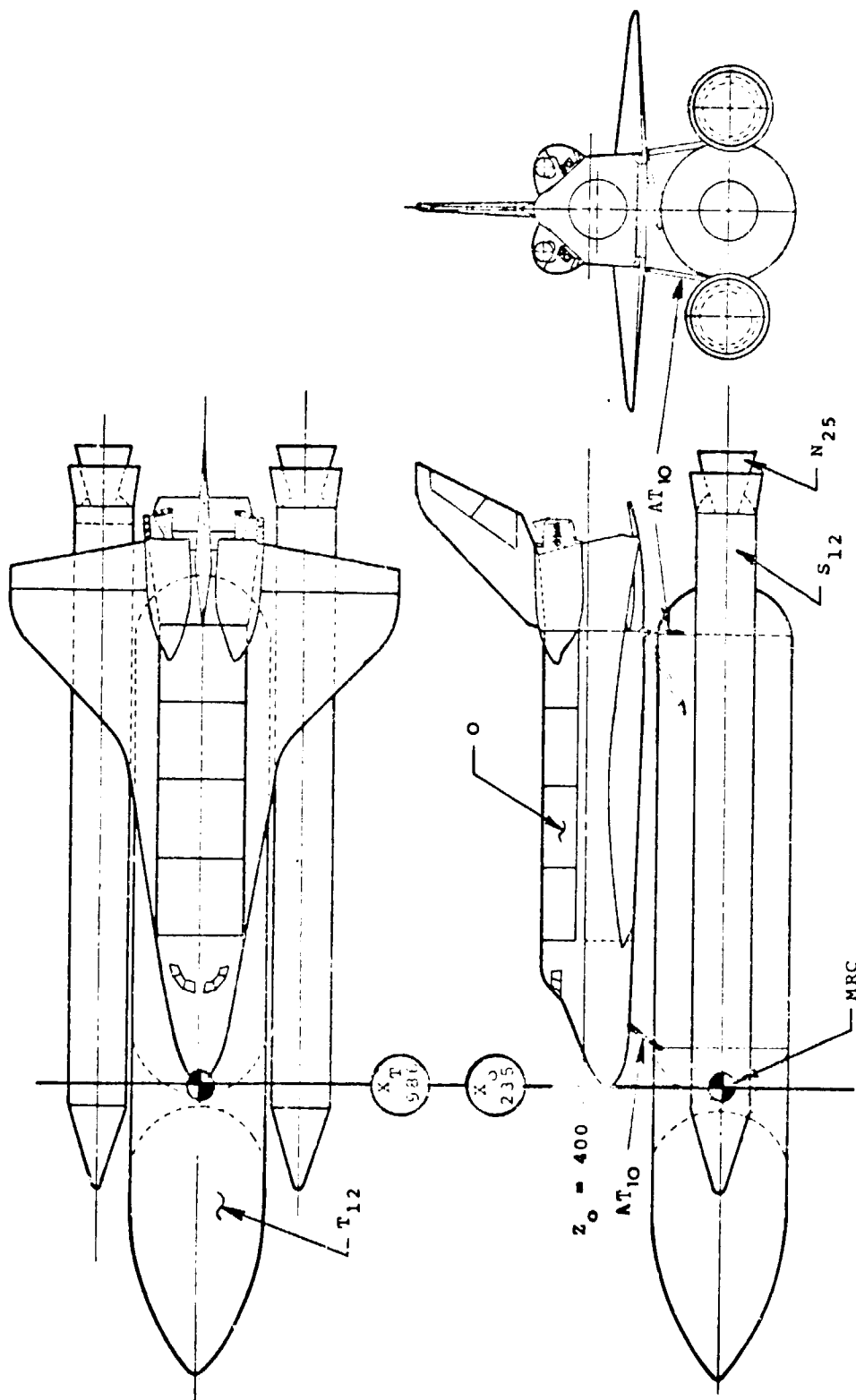
LV



a. Integrated vehicle - 2 balances, no attach structure

Figure 2. - Model Sketches

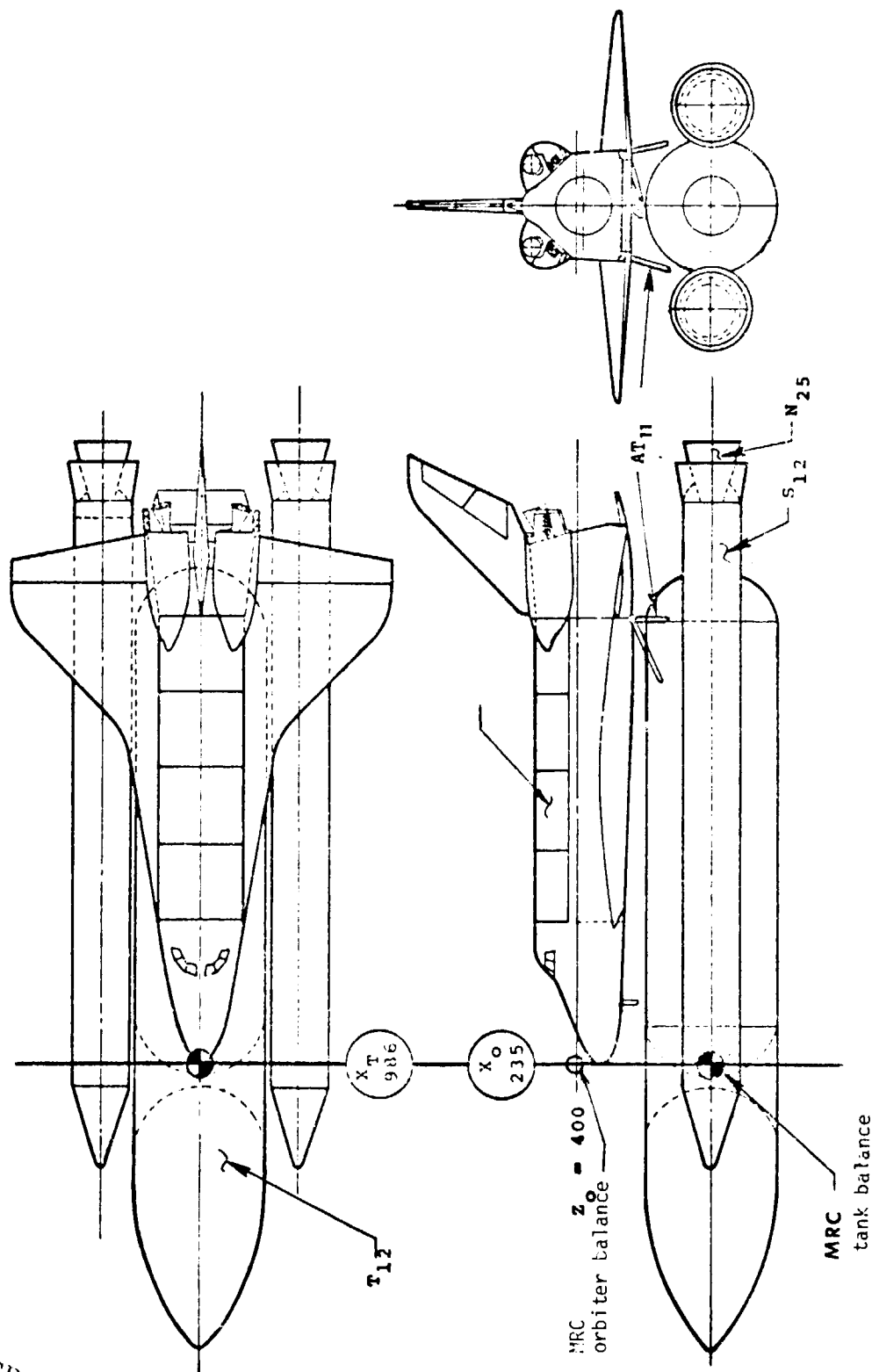
LVAP



b. Integrated vehicle - 1 balance with attach structure

Figure 2. - Continued

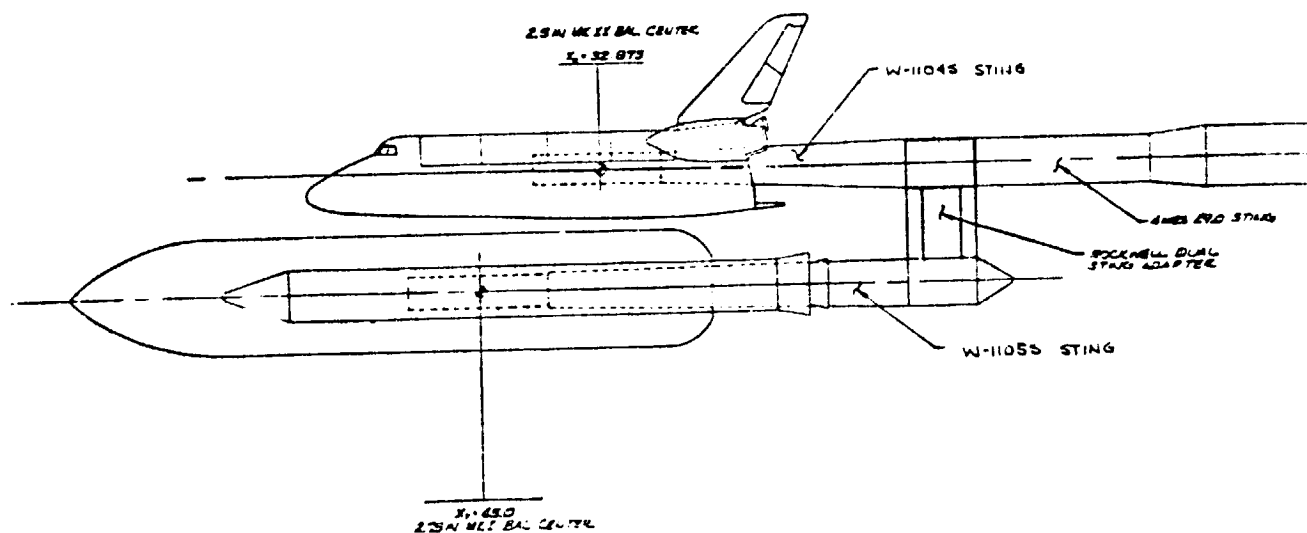
LVAP



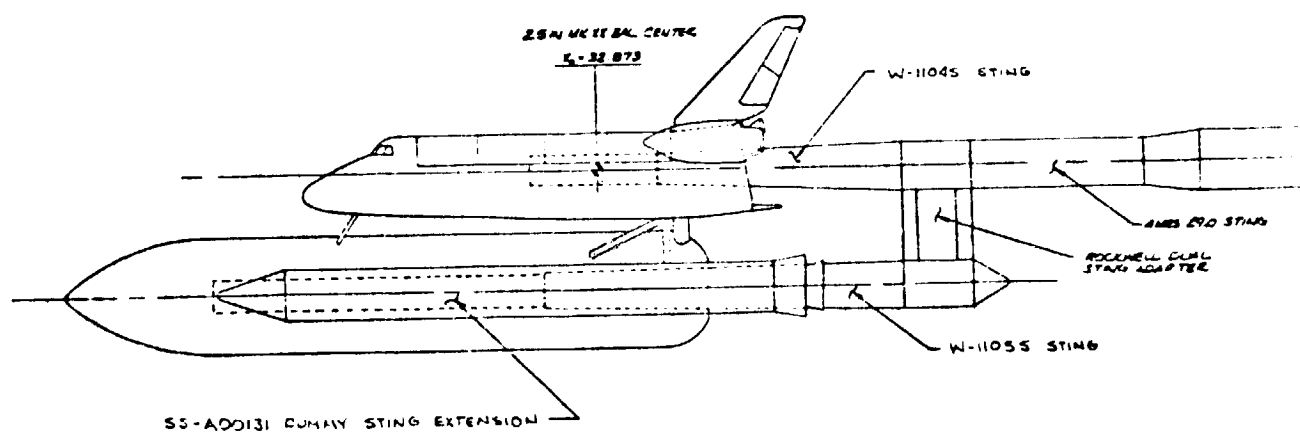
c. Integrated vehicle - 2 balances with attach structure

Figure 2. - Continued

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DUAL BALANCE CONFIGURATION ~ LV & LVAP

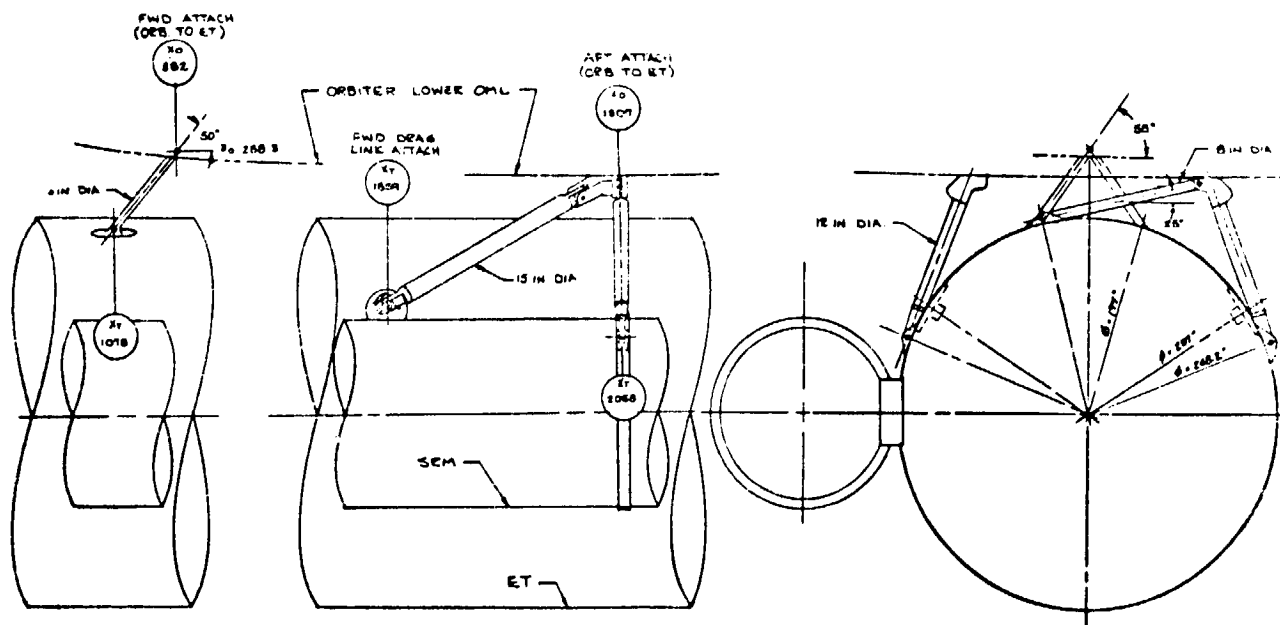


SINGLE BALANCE CONFIGURATION ~ LVA

d. Installation side views

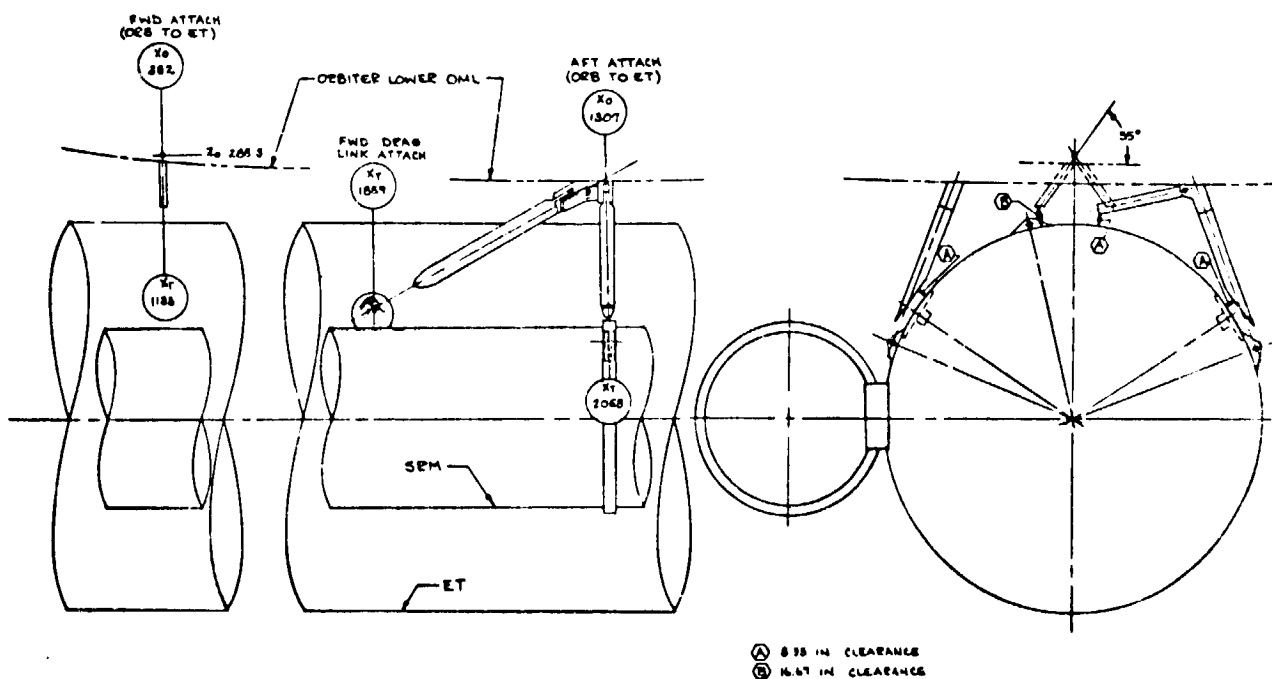
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Figure 2. - Continued



ATTACH HARDWARE CONFIGURATION - At10

ATTACH HARDWARE CONFIGURATION - At11

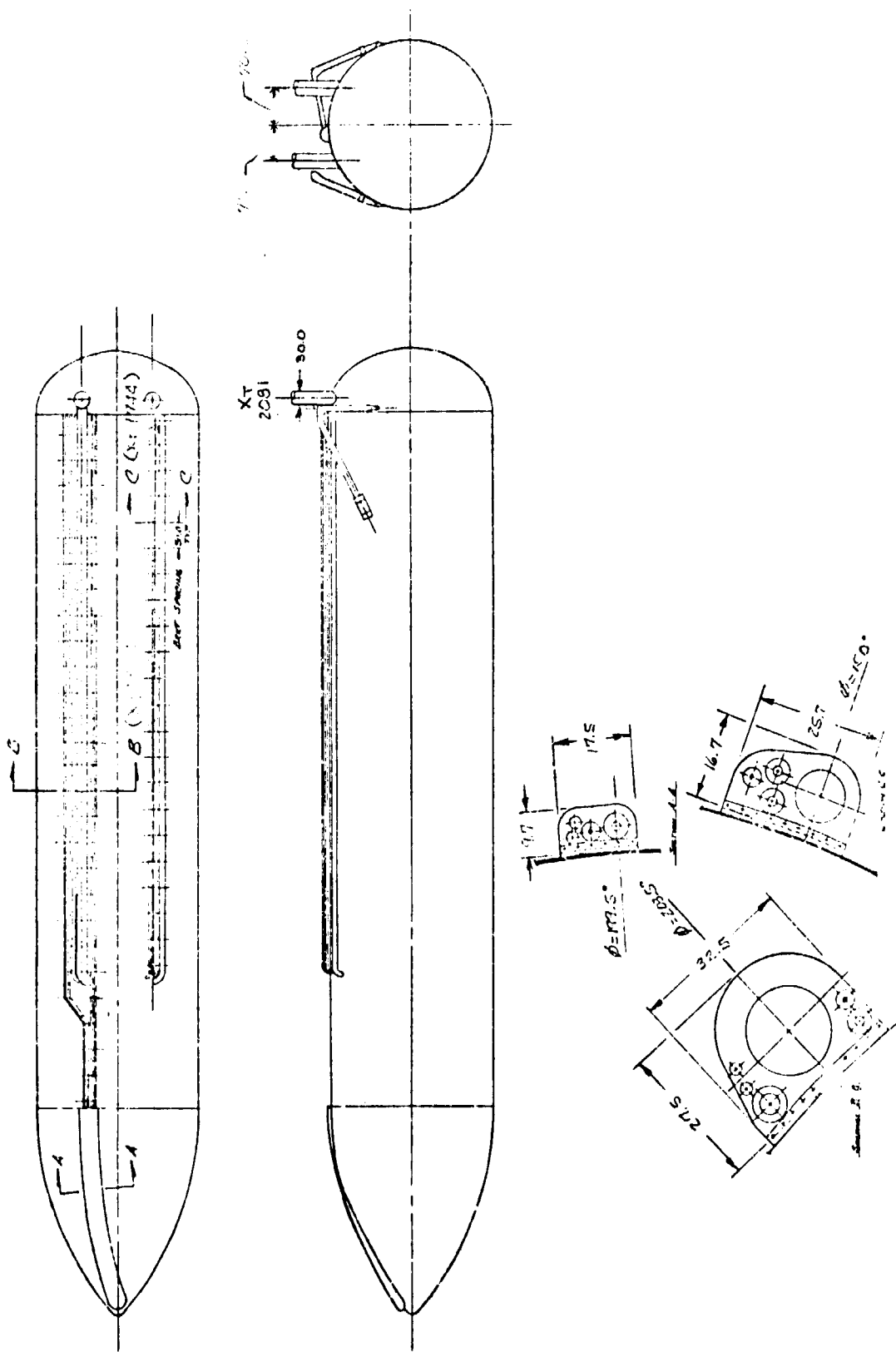


e. Attach hardware

Figure 2. Continued

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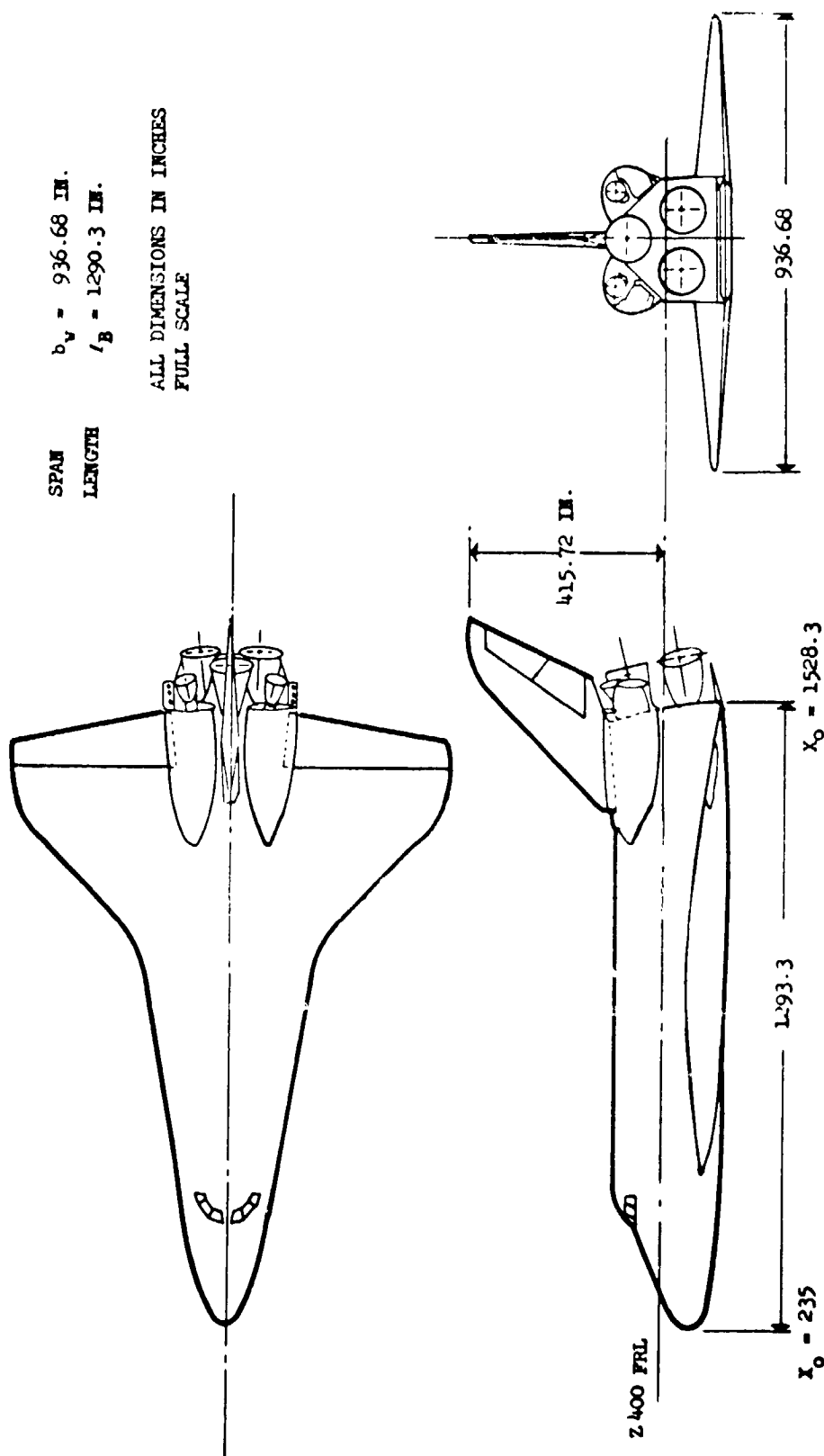


f. External tank protuberances  
Figure 2. - Continued

REFERENCE	DIMENSIONS (FS)
AREA	$S_v = 2690 \text{ FT}^2$
MAC	$C = 474.8 \text{ IN.}$

SPAN  
LENGTH  
 $b_v = 936.68 \text{ IN.}$   
 $l_B = 1290.3 \text{ IN.}$

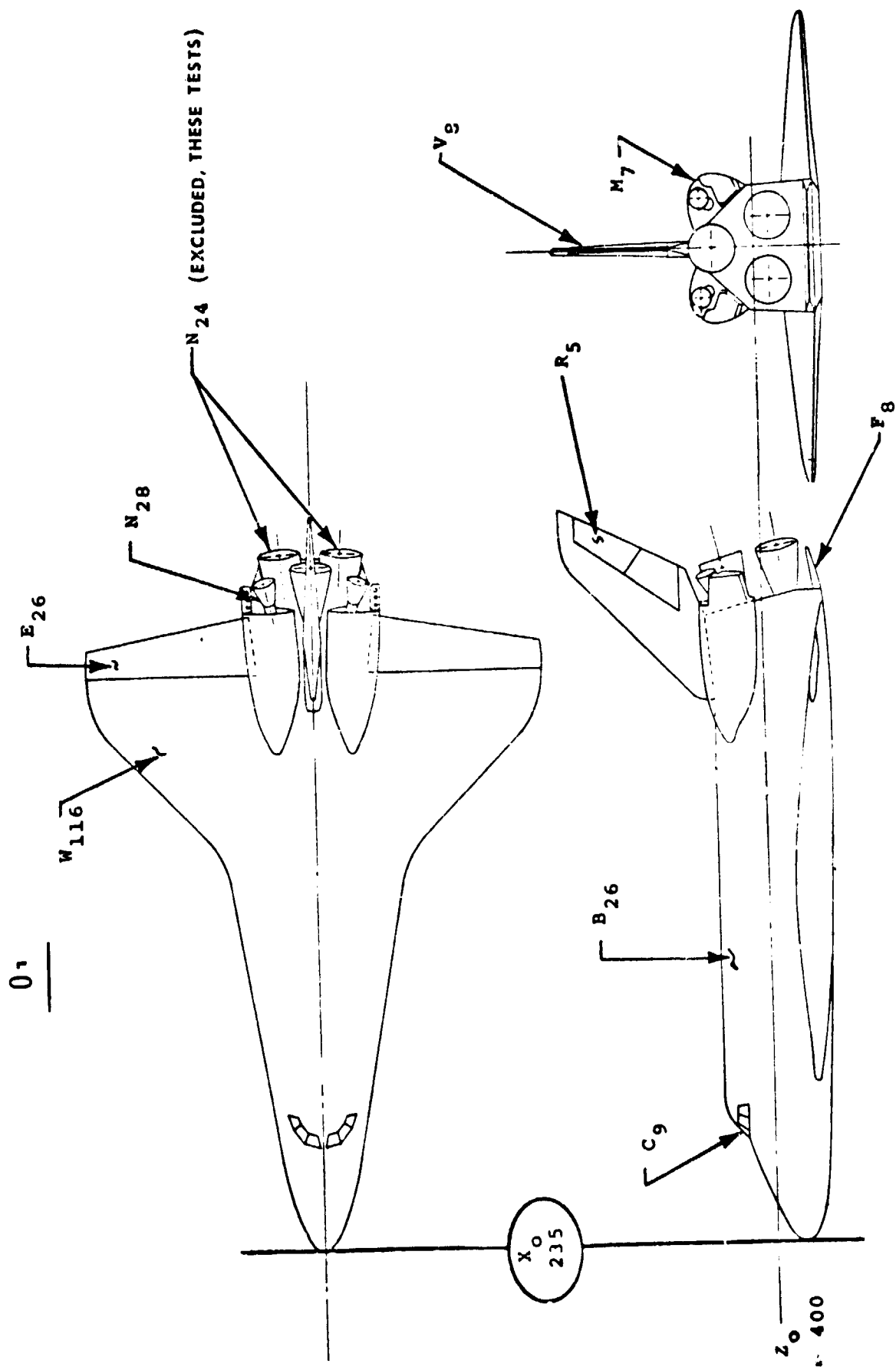
ALL DIMENSIONS IN INCHES  
FULL SCALE



g. SSV orbiter configuration 140A/B

Figure 2. - Continued

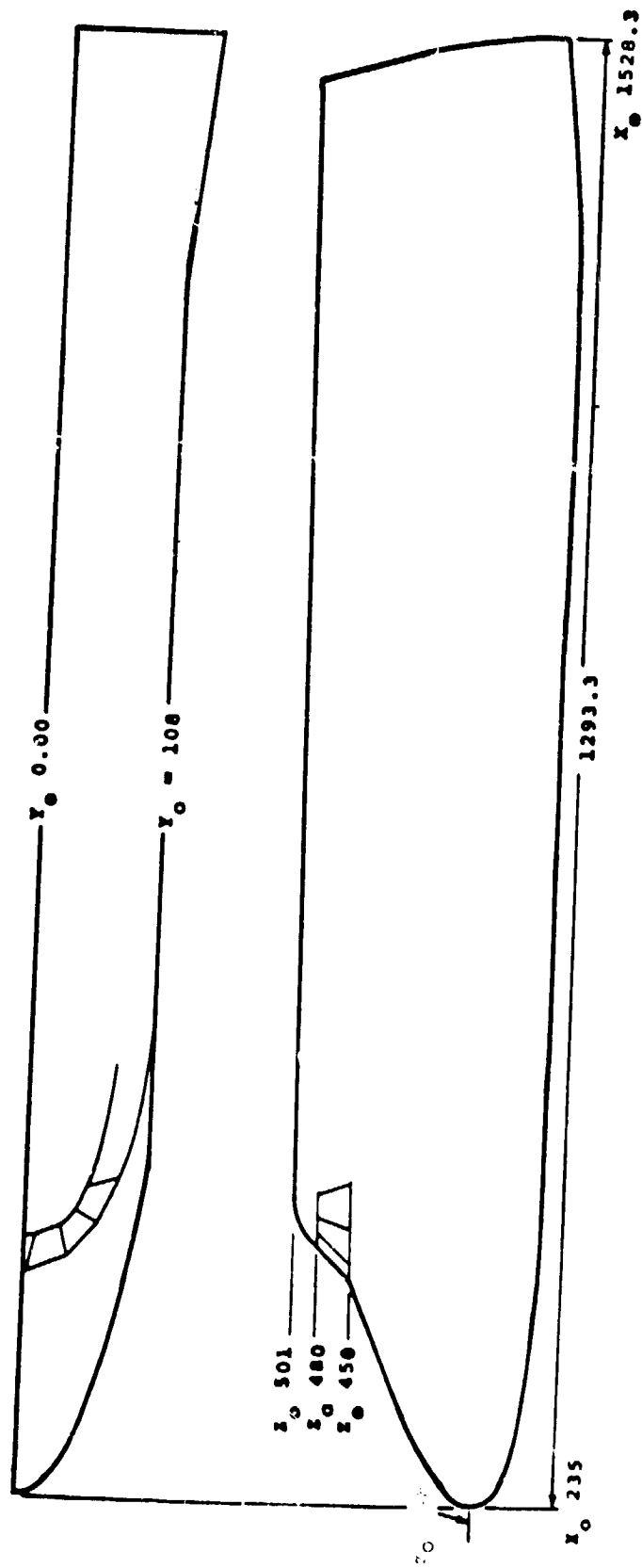
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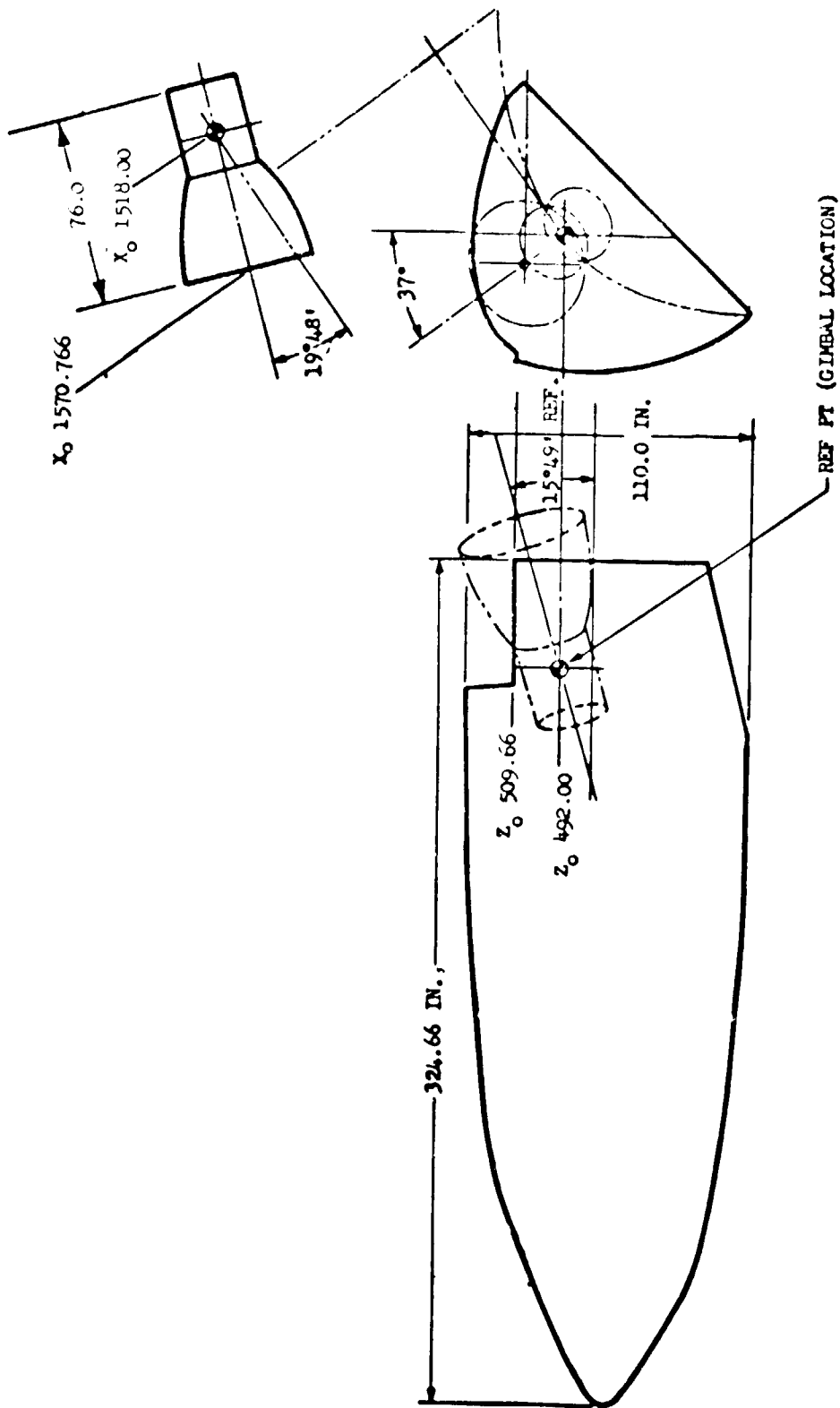
h. Orbiter nomenclature

Figure 2. - Continued

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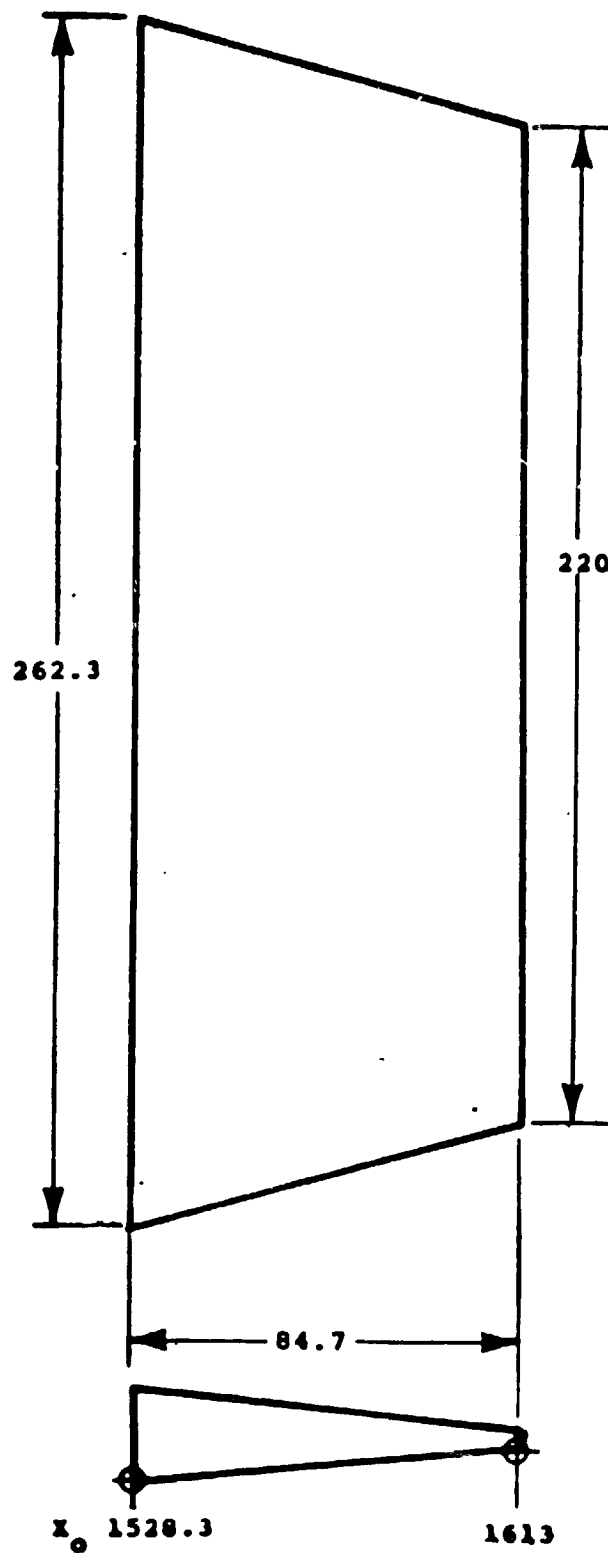
i. Canopy, Cg, and body, B<sub>26</sub>, lines drawing VL70-00193 and VL70-000140A/B  
Figure 2. - Continued



J. M7 - OMS Pod

Figure 2. - Continued

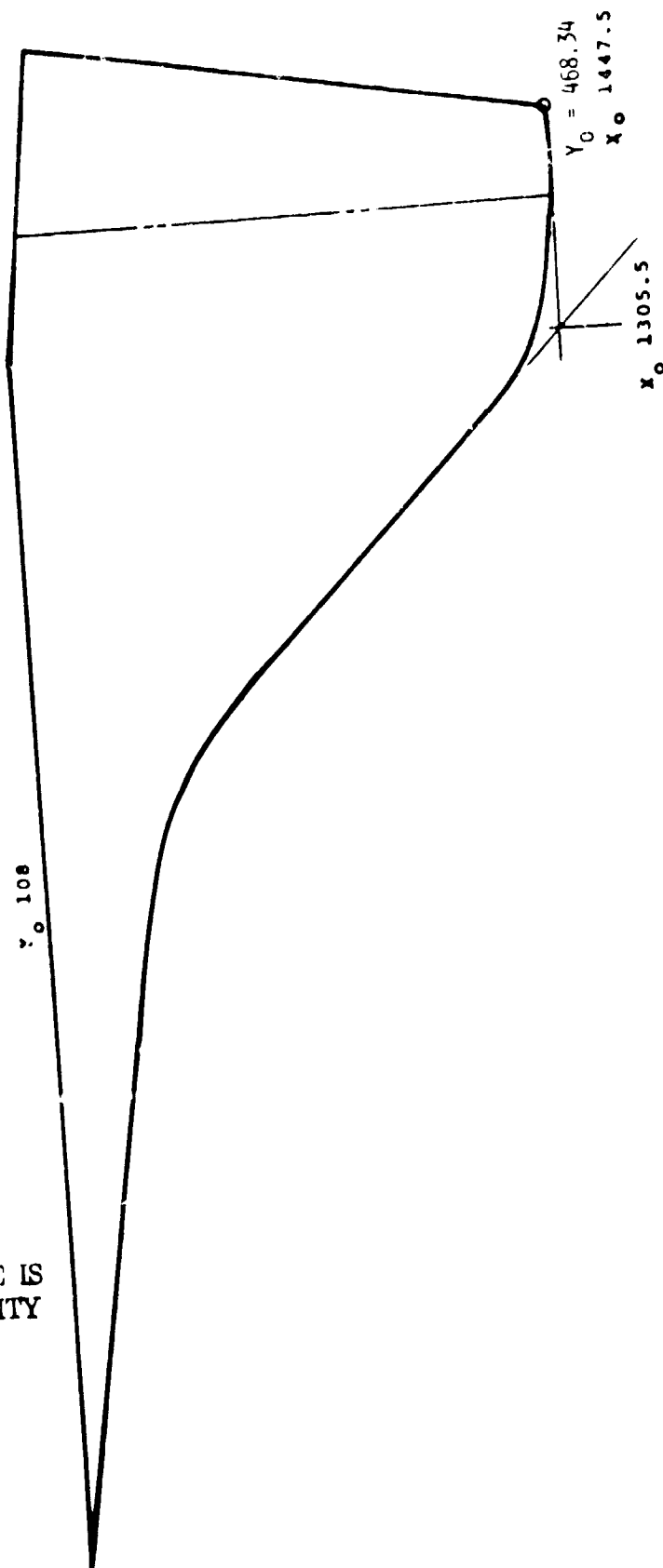
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k. Body flap,  $F_8$ , lines drawing no. VL70-000140A/B

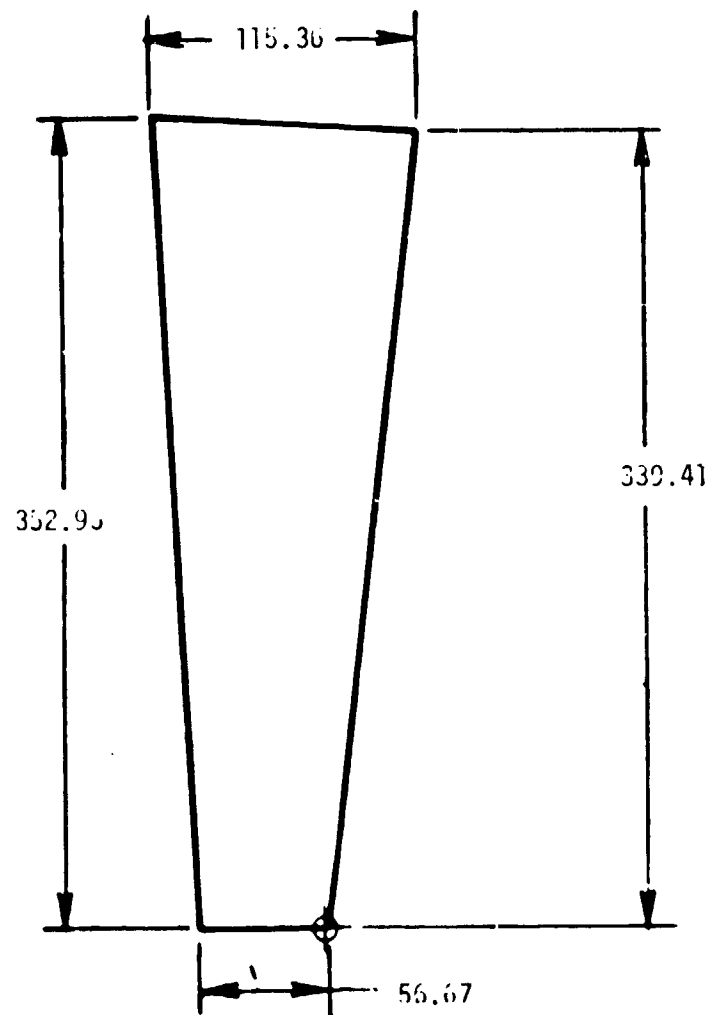
Figure 2. - Continued

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1. Wing, W<sub>116</sub>, lines drawing no. VL70-000200

Figure 2. - Continued



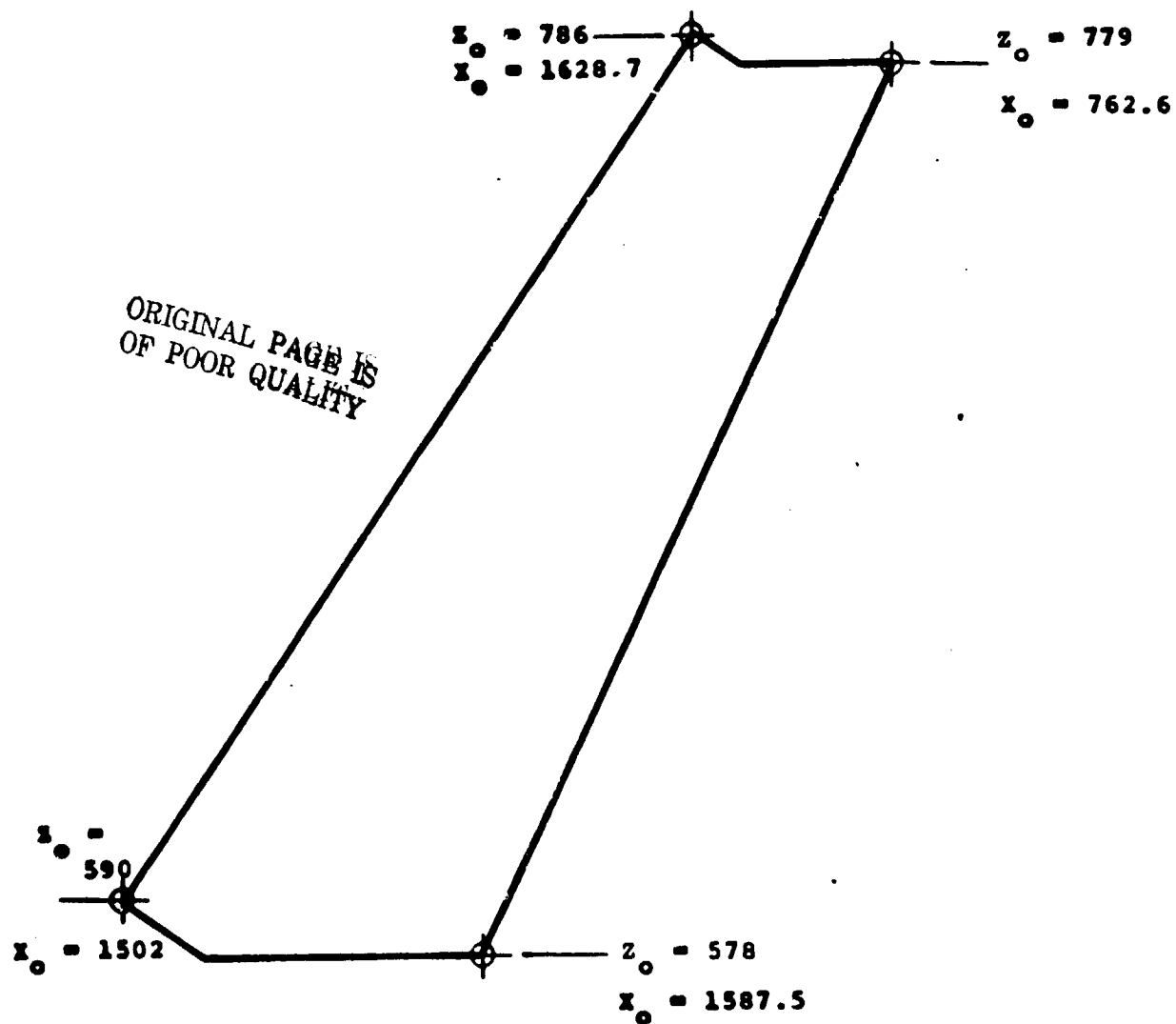
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m. Elevon, E<sub>26</sub>, lines drawing no. VL70-000200, VL70-000140A/B

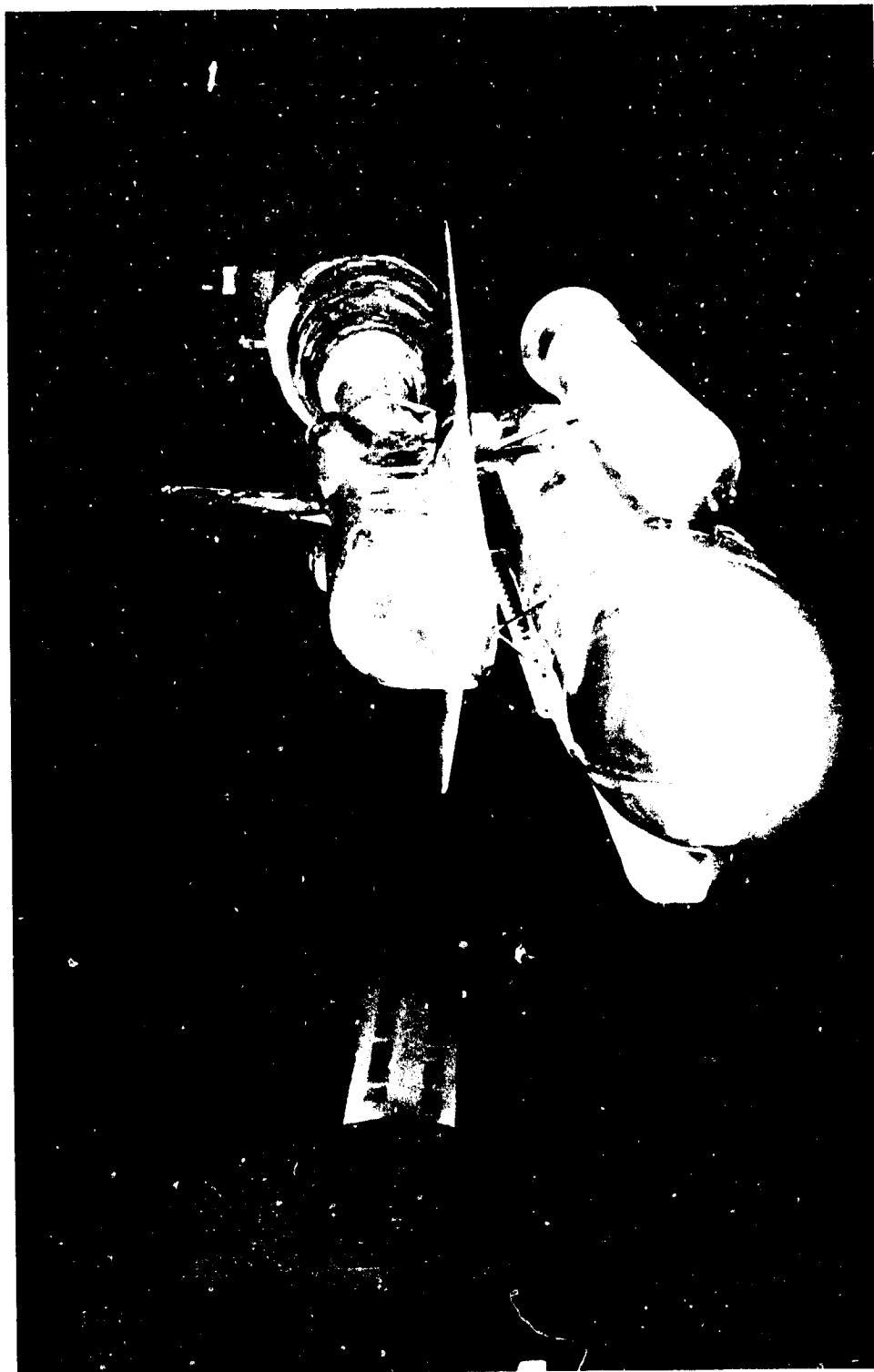
Figure 2. - Continued





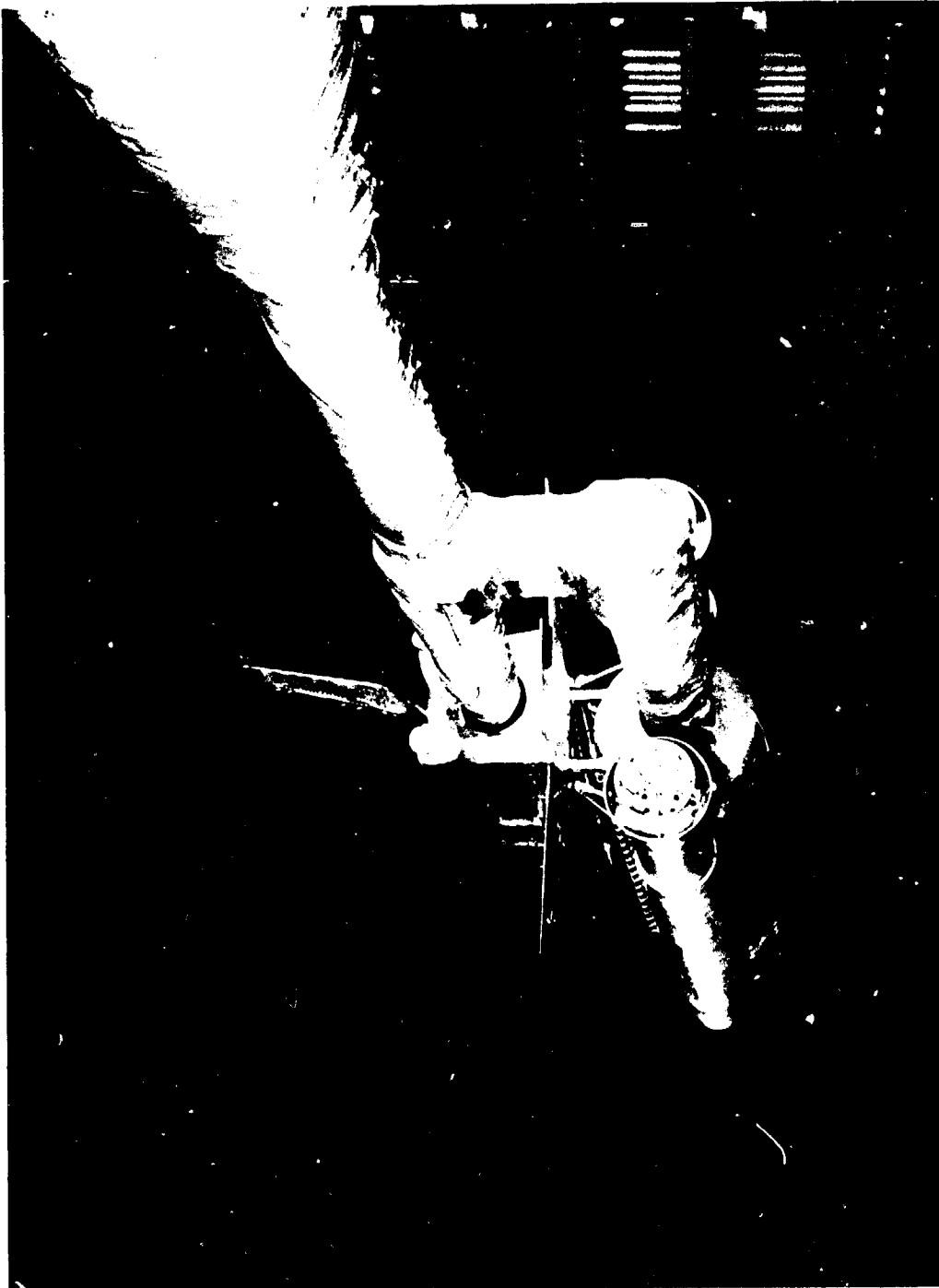


o. Rudder, R<sub>5</sub>, lines drawing no. VL70-000095  
Figure 2. - Concluded



a. Front view of model installed in tunnel

Figure 3. - Model photographs.



b. Rear view of model installed in tunnel

Figure 3. - Concluded.

TABULATED PRESSURE DATA

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4445

AR511-716 IA14 01+12+S12N25+AT11 EXTERNAL TANK

(BB1117) (03 OCT 73)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. AMR = 29.5900 INCHES  
 LREF = 36.7090 INCHES YMR = .0000 INCHES  
 BREF = 36.7090 INCHES ZMR = .0000 INCHES  
 SCALE = .0000 SCALE

MACH ( 1 ) = .898 ALPHA( 1 ) = -8.170

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0400	.6062	.1715	-.3361	-.6303	-.5155	-.0985	-.0042	-.0186	-.1556	-.1829	-.0554	-.0121	.0028
30.000				.1877	-.3222	-.6278	-.4913	-.1084	-.0133	-.0439	-.2286	-.3817	-.0852	-.0460	-.0191
60.000				.2449	-.2641	-.5721	-.4064	-.0846	-.0017	-.1006	-.4189	-.6404	-.1102	-.0328	.0198
90.000			.7742	.3511	-.1569	-.4853	-.2330	.0235	.2131	.2818	-.6251	-.7045	-.2090	-.0298	.0252
120.000				.4796	-.0268	-.3652	-.2520	.0032	.3502	.0336	-.0246	-.2026	-.2048	-.0899	.0120
150.000								.1592	.1834	.1834	-.2557	-.1307			
165.000				.5842	.0653	-.2796	-.2349	-.0426	.2521	.3169	-.0733	-.5034	-.3490	-.2288	-.0669
180.000				.1032	-.2392	-.2135	-.0470	.1301	.2425	.3605	.1216	-.4737	-.2794	-.1908	-.0227
270.000			.7686	.1133	-.2305	-.2063	-.0163	.1329	.2410	.3410	.2074	-.5142	-.2422	-.1808	-.0152
X/LT	.7460	.8530	.9280					.2724							

## PARAMETRIC DATA

BETA0 = .000 ELEV01 = .000  
 RUDDER = .000 SPDRK = .000

PHI

.000	-.0123	-.0817	-.3240
30.000	-.0165	-.0483	-.2940
60.000	-.0076	-.0215	-.1606
90.000	.0239	-.0320	
120.000	.0464	-.1359	.0571
150.000	.0402	-.0320	-.0112
160.000	-.0292	-.0659	-.1591
165.000	.0308	-.0150	.0685
180.000	.0372	-.0065	-.1055

MACH ( 1 ) = .898 ALPHA( 2 ) = -4.140

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1020	.7292	.2825	-.2451	-.5608	-.6158	-.0877	-.0014	-.0076	-.1534	-.2022	-.0464	-.0009	-.0028
30.000				.2901	-.2349	-.5469	-.5594	-.0882	.0118	.0009	-.2344	-.2462	-.0399	-.0286	-.0283
60.000				.3283	-.1936	-.4930	-.4184	-.0352	.0832	.0428	-.4617	-.5425	-.3541	-.0474	-.0006
90.000			.8302	.3869	-.1346	-.4574	-.1760	.0634	.2656	.3963	-.5510	-.7270	-.1329	-.0163	.0085
120.000				.4509	-.0722	-.4059	-.2006	.0082	.1949	.2950	-.1711	-.0912	-.1779	-.1036	-.0008
150.000								.1426	.1039	.1039	-.2392	-.1741	-.1372		
165.000				.5023	-.0224	-.3714	-.2306	-.0559	.2105	.2564	-.0942	-.4743	-.3226	-.2326	-.0723
180.000								.1185							

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ARC11-715 IA14 01-712+S12N25+AT11 EXTERNAL TANK

(RB1117)

MACH (1) = .998 ALPHA(2) = -4.140

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000															
180.000	1.1020	.9631	.5279	-.0023	-.3546	-.2396	-.0591	.0935	.1994	.3109	.1006	-.5166	-.2579	-.1933	-.0272
270.000		.6285						.0963	.1986	.3020	.1868	-.5672	-.2186	-.1793	-.0203

X/LT .7480 .8530 .9280

PHI	.0000	-.0081	-.0393	-.3035
30.000		-.0123	-.0313	-.2849
60.000		.0098	.0031	-.1706
90.000		.0345	.0046	
120.000		.0588	-.0804	.0336
135.000		.0548	.0118	.0291
150.000		-.0024	-.0163	-.0875
165.000		.0477	.0266	.0551
180.000		.0514	.0343	-.1186

MACH (1) = .998 ALPHA(3) = -.220

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000	1.1260	.9379	.3930	-.1409	-.4904	-.5504	-.0918	.0082	.0149	-.1400	-.1732	-.0898	-.0411	-.0217	-.0124
180.000			.3935	-.1396	-.4914	-.5460	-.0850	.0342	.0423	-.2039	-.1910	-.1107	-.0579	-.0427	-.0179
270.000			.3940	-.1401	-.4735	-.5130	-.0195	.1343	.1463	-.5297	-.5002	-.2071	.0020	-.0068	-.0014
PHI		.8522	.4002	-.1295	-.4528	-.5629	.0850	.2890	.4404		-.7081	.0485	.0124	-.0902	-.0665
120.000			.4032	-.1257	-.4567	-.2071	.0100	.1725	.2295	-.3205	-.1990	-.0743	-.1006	-.1144	-.0112
135.000								.1206	.0149			-.1357		-.1485	
150.000			.4182	-.1138	-.4484	-.2740	-.0575	.0963	.1666	.2026	-.1363	-.3503	-.2600	-.2313	-.0688
165.000				-.1035	-.4520	-.5839	-.0675	.0710	.1602	.2655	.0800	-.5122	-.1831	-.1844	-.0247
180.000	1.1260	.8665	.4172	-.1113	-.4511	-.3824	-.0555	.0710	.1542	.2613	.1662	-.5978	-.1689	-.1645	-.0150
270.000		.8549													.4391

X/LT .7480 .8530 .9280

PHI	.0000	-.0176	-.2328
30.000		.0035	-.0027
60.000		.0173	.0312
90.000		.0240	.0427
120.000		.0671	-.0052
135.000		.0723	.0586
150.000		.0320	.0359



(R31717)

ARC11-715 IAL14 ON+112+512+25+AT11 EXTERNAL TANK

WACH (1) = .895 ALPHAD(3) = -.220

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/L 7460 .8500 .9280  
 165.000 .0717 .0647 .0393  
 180.000 .0752 .0721 .1246

WACH (1) = .893 ALPHAD(4) = 3.830

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/L 10000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5980 .6380  
 0.00 1.1113 .9377 .5049 -.0260 -.4051 -.4581 -.0996 .0201 .0434 -.0902 -.1186 -.0686 -.0230 -.0081 -.0022  
 30.000 .4880 -.0240 -.4012 -.4744 -.0781 .0598 .0850 .0850 .1406 .1406 .1403 .0723 .0164 .0166 .0100  
 60.000 .4492 .0822 .4488 .3930 .0154 .1630 .2232 .4066 .2815 .1025 .0136 .0181 .0062 .0181 .0062  
 90.000 .3954 .1306 .4790 .11754 .0664 .2698 .4204 .4204 .6697 .12073 .0707 .1160 .0579 .1160 .0579  
 120.000 .3490 .11786 .5044 .12203 .1172 .1283 .1369 .1369 .4045 .1434 .0450 .0828 .0098 .0828 .0098  
 150.000 .3255 .12048 .5435 .4112 .0571 .0743 .1186 .1186 .1895 .1453 .3564 .1975 .1830 .1830 .0412  
 165.000 .3045 .12266 .5491 .3598 .0561 .0597 .1312 .1312 .2432 .1620 .16450 .1237 .1199 .1199 .0103  
 180.000 .2939 .12266 .5491 .3598 .0561 .0597 .1312 .1312 .2432 .1620 .16450 .1237 .1199 .1199 .0103

W/L 7460 .8500 .9280

0.00 .0145 .0077 .1955  
 30.000 .0135 .0180 .1924  
 60.000 .0236 .0452 .0776  
 90.000 .0392 .0734 .1248  
 120.000 .0589 .1076 .1248  
 150.000 .0954 .1045 .0845  
 165.000 .0901 .0761 .0095  
 180.000 .1033 .1112 .0628  
 180.000 .1007 .1109 .11146

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DATE 26 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1117)

ARC11-716 1A14 21+T12+S12N25+AT11 EXTERNAL TANK

MACH ( 1 ) = .898 ALPHA( 5 ) = 8.030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.0370	1.0300	.6236	.0949	-.2930	-.3462	-.1092	.0404	.0830	-.0079	-.0200	-.0079	.0083	.0145	.0194
30.000			.5810	.0532	-.3327	-.3626	-.0957	.0658	.1228	-.0559	-.0487	-.0154	.0012	.0034	.0115
60.000			.4773	-.0463	-.4200	-.3533	-.0113	.1770	.2892	-.2786	-.0928	.0028	.0064	.0031	.0046
90.000		.7734	.3536	-.1575	-.5137	-.2717	.0349	.2281	.3223	-.4957	-.1252	-.0470	-.0402	-.0116	-.0116
120.000			.2547	-.2563	-.5756	-.2691	-.0574	.0410	.0056	-.1693	-.5052	-.2137	-.0311	-.0417	.0219
135.000								.0348		.0258	-.2831			-.0665	
150.000			.2120	-.3070	-.6049	-.4939	-.0509	.0405	.0637	.1746	-.1220	-.3637	-.1717	-.1311	-.0292
165.000				-.3244	-.6158	-.3211	-.0663	.0442	.1110	.2251	.0764	-.5708	-.1075	-.1045	.0237
180.000	1.0570	.6249	.1820	-.3361	-.6134	-.2644	-.0732	.0457	.1179	.2360	.1645	-.6901	-.1042	-.0797	.0291
270.000		.7855							.3257						

X/LT .7480 .8530 .9280

PHI

.000	.0348	.0307	-.1586
30.000	.0370	.0406	-.1742
60.000	.0379	.0603	-.1089
90.000	.0625	.0440	
120.000	.1201	.1030	.1209
135.000	.1196	.1365	.0982
150.000	.0874	.1138	.0266
165.000	.1239	.1360	.0918
180.000	.1294	.1401	-.0927

MACH ( 2 ) = .977 ALPHA( 1 ) = -7.920

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.0920	.6834	.2544	-.2439	-.5567	-.6074	-.1645	-.0860	.0853	-.0569	-.3222	-.5147	-.0838	-.0199	.0373
30.000			.2670	-.2272	-.5474	-.5580	-.2447	.0024	.0581	-.1852	-.4322	-.3279	-.1339	-.0783	.0054
60.000			.3254	-.1807	-.5105	-.5357	-.3808	.0774	-.0026	-.4934	-.7456	-.3748	-.3005	-.1069	.0422
90.000		.8379	.4222	-.0837	-.4398	-.5102	.0170	.2980	.3635	-.6187	-.7054	-.1988	-.1315	-.0165	-.0165
120.000			.5395	.0365	-.3474	-.4248	.0005	.2863	.4267	.0693	.0569	-.1234	-.1963	-.2676	-.0667
135.000								.2476		.2457	-.1642			-.3350	
150.000			.6345	.1170	-.2783	-.3509	-.2912	.2303	.3247	.3803	.0209	-.3823	-.2947	-.4705	-.1462
165.000				.1568	-.2452	-.3164	-.2722	.2064	.3077	.4281	.1995	-.3274	-.2307	-.3709	-.1177
180.000	1.0920	1.0900	.6880	.1669	-.2357	-.3039	-.0317	.1850	.3052	.4177	.2820	-.3515	-.1905	-.3758	-.1089
270.000		.8335							.3491						

X/LT .8530 .9280

PHI



DATE OF JAN 73

TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1T17)

ARC1:-716 IA14 DI+T12+S12N25+AT11 EXTERNAL TANK

MACH ( 2 ) = .977 ALPHAC ( 2 ) = -7.925

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .0530 .9280

PHI			
.000	.0525	.0208	-.2130
30.000	.0427	.0290	-.1760
60.000	.0800	.0583	-.0007
90.000	.0800	.0539	
120.000	.1090	-.0116	.0785
135.000	.0937	.0504	.0404
150.000	.0627	.0178	-.1043
165.000	.0909	.0560	.1256
180.000	.0959	.0623	-.0133

MACH ( 2 ) = .976 ALPHAC ( 2 ) = -3.880

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1945	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	.7938	.3578	-.1800	-.4965	-.9557	-.1936	-.0415	.1153	-.0413	-.3038	-.4624	-.0330	.0079	.0285
30.000			.3571	-.1521	-.4851	-.5519	-.2979	.0402	.1170	-.1347	-.3658	-.3656	-.0618	-.0303	-.0028
60.000			.4203	-.1200	-.4642	-.4595	-.2324	.2229	.1485	-.4918	-.6477	-.2810	-.1692	-.0806	.0229
90.000		.8861	.4518	-.0548	-.4263	-.4952	-.0248	.3634	.4689	-.6856	-.7060	-.1847	-.1005	-.0107	
120.000			.5095	-.0108	-.3835	-.4540	-.0156	.2425	.3705	-.0874	-.0302	-.1314	-.1719	-.2450	-.0452
135.000			.5526	.0321	-.3448	-.4226	-.1276	.1849	.2809	.3017	-.0466	-.3726	-.2663	-.4110	-.1080
150.000				.0493	-.3340	-.4126	-.3005	.1759	.2595	.3591	.1425	-.3800	-.2115	-.3221	-.0852
165.000	1.1450	1.0030	.5758	.0525	-.3342	-.4066	-.0778	.1370	.2443	.3563	.2356	-.4218	-.1789	-.3160	-.0899
180.000		.8880						.4680							
270.000															

X/LT .7460 .0530 .9280

PHI			
.000	.0909	.0404	-.1854
30.000	.0363	.0432	-.1686
60.000	.0733	.0844	-.0390
90.000	.0903	.1006	
120.000	.1138	.0371	.1261
135.000	.1124	.0905	.0774
150.000	.0790	.0659	-.0361
165.000	.1041	.0938	.1053
180.000	.1025	.1001	-.0394

ARC11-716 IA14 Q1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH ( 2 ) = .977 ALPHA( 3 ) = .090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI															
.000	1.1620	.8971	.4638	-.0395	-.4206	-.4903	-.5827	.0281	.1379	-.0180	-.2678	-.3753	.0079	.0128	.0120
30.000			.4643	-.0601	-.4206	-.4970	-.4564	.0043	.1701	-.0780	-.3122	-.3397	-.0127	-.0108	.0013
60.000			.4614	-.0625	-.4209	-.4824	-.2403	.1835	.2524	-.3341	-.4866	-.2387	-.0377	-.0069	.0049
90.000		.9026	.4638	-.0568	-.4198	-.4756	-.1139	.3856	.5117	-.7150	-.3513	-.0891	-.0675	-.0093	
120.000			.4628	-.0371	-.4214	-.4646	-.2466	.2597	.3013	-.2257	-.2430	-.1068	-.0916	-.1770	-.0447
135.000								.1420		.0631		-.1782		-.2106	
150.000			.4734	-.0324	-.4203	-.4827	-.1144	.0876	.2377	.2435	-.1398	-.3405	-.1996	-.3012	-.1104
165.000				-.0349	-.4136	-.4873	-.1202	.0786	.2137	.2504	.0881	-.4154	-.1332	-.2393	-.0631
180.000	1.1620	.9097	.4696	-.0346	-.4176	-.4851	-.0812	.0163	.1940	.2892	.1891	-.4807	-.1355	-.2258	-.0617
270.000		.9037							.5154						

X/LT .7460 .8330 .9280

PHI															
.000	.0488	.0559	-.1489												
30.000	.0494	.0644	-.1310												
60.000	.0658	.0950	-.0501												
90.000	.0942	.1190													
120.000	.1278	.0794	.1674												
135.000	.1305	.1239	.1197												
150.000	.1034	.1081	.0414												
165.000	.1231	.1317	.0820												
180.000	.1231	.1314	-.0616												

MACH ( 2 ) = .973 ALPHA( 4 ) = 4.020

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI															
.000	1.1520	.9909	.5670	.0413	-.3524	-.4227	-.5067	.0888	.1516	.0068	-.2052	-.2719	.0276	.0253	.0133
30.000			.5473	.0230	-.3679	-.4385	-.4945	.1334	.1909	-.0368	-.2252	-.2699	.0209	.0116	.0033
60.000			.5048	-.0181	-.3985	-.4632	-.0870	.1056	.3274	-.2800	-.3258	-.2087	-.0159	.0072	.0003
90.000		.8833	.4540	-.0685	-.4402	-.4923	-.1897	.3345	.4869	-.6131	-.2496	-.0049	-.0333	-.0420	
120.000			.4037	-.1180	-.4727	-.5238	-.3129	.2049	.2041	-.2981	-.4275	-.2167	-.0016	-.0770	-.0077
135.000								.1266		.0322		-.3003		-.1025	
150.000			.3799	-.1464	-.4898	-.5467	-.2030	.0344	.1796	.2239	-.1263	-.3899	-.1365	-.1840	-.0602
165.000				-.1607	-.4999	-.5581	-.1146	.0028	.1774	.2703	.0938	-.4086	-.1107	-.1380	-.0121
180.000	1.1520	.8036	.3638	-.1612	-.5067	-.5805	-.1024	-.0264	.1631	.2165	.1760	-.5553	-.1054	-.1199	-.0030
270.000		.8902							.4824						

X/LT .7460 .8330 .9280

PHI



APC11-716 JAL14 DC-T12-S12N25-AT11 EXTERNAL TANK (RB1717)

MACH (2) = .973 ALTITUDE (4) = 4,020

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PMI			
.000	.0344	.0708	-.1002
30.000	.0552	.0801	-.1018
60.000	.0615	.0997	-.0024
90.000	.0876	.1368	
120.000	.1420	.1278	.1515
135.000	.1406	.1593	.1202
150.000	.1159	.1344	.0524
165.000	.1401	.1585	.0796
180.000	.1459	.1578	-.0582

MACH (2) = .977 ALTITUDE (5) = 8,030

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2800 .3440 .3940 .4510 .5050 .5580 .6380

PMI														
.000	1.1040	1.0790	.6786	.1556	-.2532	-.3372	-.4301	.1139	.1743	.0597	-.1429	-.0284	.0426	.0339
30.000			.6375	.1158	-.2857	-.3707	-.4450	.1420	.2145	.0304	-.1694	-.0029	.0334	.0224
60.000			.5400	.0202	-.3623	-.4397	-.4951	.2645	.3691	-.1451	-.2103	.0053	.0148	.0055
90.000		.8347	.4216	-.1362	-.4495	-.5072	-.3581	.3143	.3784	-.4843	-.1625	-.0540	-.0374	.0023
120.000			.3246	-.1814	-.5172	-.5771	-.2282	.0524	.0769	-.1734	-.5113	-.2305	-.0093	-.0277
135.000							.0508			.0406		-.3198		-.0561
150.000			.2788	-.2198	-.5459	-.5435	-.3654	-.0027	.1283	.2193	-.1097	-.3693	-.1107	-.1357
165.000				-.2356	-.5521	-.6102	-.1910	-.1305	.1963	.2612	.0905	-.3809	-.0791	-.0878
180.000	1.1040	.6920	.2545	-.2440	-.5567	-.6118	-.1768	-.1158	.1953	.2640	.1780	-.5772	-.0830	-.0699
270.000		.8437												.0181

X/LT .7460 .8330 .9280

PMI			
.000	.0731	.0973	-.0564
30.000	.0731	.1028	-.0800
60.000	.0665	.1184	-.0379
90.000	.1082	.1181	
120.000	.1561	.1754	.1670
135.000	.1555	.1905	.1284
150.000	.1528	.1637	.0727
165.000	.1566	.1823	.1328
180.000	.1582	.1779	.1034

19C11-715 1A14 D+T:2+512V25+AT:11 EXTERNAL TANK (R811717)

MACH (3) = 1.102 ALPHA(1) = -7.943

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C=

X/L	0.000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2600	.3440	.3940	.4310	.5030	.5380	.6380
WALL															
0.000	1.1680	.7959	.3750	-.0020	-.3762	-.4339	-.4935	-.5090	.0541	.1076	-.1063	-.3014	-.0413	.0094	-.0228
30.000			.3895	-.0723	-.3716	-.4309	-.4645	-.5103	.0979	-.0270	-.2271	-.1873	-.0698	-.0386	-.0522
60.000			.4614	-.1316	-.3438	-.4066	-.4227	-.5243	.0782	-.3848	-.5534	-.2185	-.1869	-.0473	-.0279
90.000		.9330	.3344	.0544	-.2830	-.3484	-.4659	.0342	.0905	-.3910	-.4678	-.0856	-.0856	-.0873	-.0998
120.000			.3450	.1630	-.1597	-.2704	-.3570	.1490	.5571	.2268	.0075	.0315	-.0242	-.1039	-.1940
150.000								.0002		.0355		.0186		-.1601	
180.000			.7342	.2411	-.1351	-.2114	-.3098	-.1910	.4573	.0119	.1785	-.1727	-.1127	-.2991	-.2781
210.000		1.1740	.2774	-.1033	-.1947	-.1947	-.2753	-.1925	.4561	.5129	.3422	-.1149	-.0534	-.1972	-.2078
240.000		.9294	.7846	.2893	-.0997	-.1745	-.2666	.0293	.4553	.542	.2193	-.1203	-.0140	-.1663	-.1848
									.4614						

X/L 7460 .8530 .9280

WALL

0.000	-.0428	.0658	-.0696												
30.000	-.0533	.0740	-.0308												
60.000	-.0193	.0839	.1104												
90.000	.0022	.0786													
120.000	.0224	.0043	.1165												
150.000	.0040	.0633	.0654												
180.000	-.0108	.0213	-.0185												
210.000	.0104	.0731	.2151												
240.000	.0117	.0780	.1083												

MACH (3) = 1.101 ALPHA(2) = -3.892

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C=

X/L	0.000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2600	.3440	.3940	.4310	.5030	.5380	.6380
WALL															
0.000	1.2220	.8914	.4755	.0016	-.3220	-.3819	-.4347	-.2024	.1064	.1308	-.0943	-.2653	-.0376	.0399	-.0027
30.000			.4835	.0090	-.3213	-.3814	-.4466	-.3034	.1490	.0360	-.1763	-.2460	-.0483	.0086	-.0309
60.000			.5144	.0271	-.3004	-.3596	-.3907	-.1575	.2259	-.3006	-.4780	-.1327	-.0977	-.0737	-.0223
90.000		.9795	.5661	.0723	-.2637	-.3315	-.4141	.1690	.5511	-.5419	-.5419	-.4810	-.0788	-.0584	-.0784
120.000			.6182	.1239	-.2280	-.2987	-.3796	.1090	.4875	.0770	.1280	.0411	-.0365	-.0945	-.1757
150.000								.1147		.3037		-.0055		-.1319	
180.000			.6526	.1847	-.1968	-.2653	-.3683	.1026	.3073	.4039	.1365	-.1694	-.1057	-.2617	-.2831
210.000		1.0940	.1795	-.1836	-.2589	-.3490	-.1200	.3142	.4553	.2981	.2981	-.1548	-.0485	-.1740	-.1882
240.000		.9818	.5845	.1825	-.1843	-.2541	-.3446	-.0030	.2632	.4558	.3839	-.1768	-.0178	-.1763	-.1939
									.5586						

X/L 7460 .8530 .9280

WALL



DATE: JAN 18 TABULATED PRESSURE DATA - 14124 - COL 9

REF: 716 1414 Q12+12N25+211 EXTERNAL TAN (RB117)

WACH 3 1.103 ALPHA(2) = -3.690

SECTION 1: EXTERNAL TAN DEPENDENT VARIABLE CP

W/L 7460 .6530 .9260

Q1  
 .000 -.0460 .0795 -.0391  
 30.000 -.0601 .0758 -.0292  
 60.000 -.0331 .1064 .0759  
 90.000 .0250 .1181  
 120.000 .0364 .0449 .1516  
 150.000 .0258 .1043 .1158  
 180.000 .0111 .0910 .0302  
 210.000 .0211 .1163 .2656  
 240.000 .0116 .1207 .0956

WACH (3) = 1.103 ALPHA(3) = .090

SECTION 1: EXTERNAL TAN DEPENDENT VARIABLE CP

W/L .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
 Q1  
 .000 1.2390 .9925 .5779 .0747 -.2566 -.3279 -.4053 -.3479 .1717 .1512 -.0712 -.2003 -.0803 .0393 .0180  
 30.000 .5794 .0753 -.2591 -.3307 -.4055 -.3315 .1579 .1408 -.1408 -.2120 -.0469 .0249 .0021  
 60.000 .5748 .0675 -.2584 -.3269 -.4101 -.3066 .3462 -.1739 -.3143 -.1074 .0090 .0023 -.0235  
 90.000 .9974 .0757 -.2586 -.3267 -.4011 .1133 .5026 -.5532 -.2435 -.1203 -.0603 -.0509  
 120.000 .5728 .0765 -.2594 -.3279 -.3767 -.0383 .1859 -.0622 -.1015 .0271 .0239 -.0342 -.1317  
 150.000 .5820 .0749 -.2576 -.3242 -.4119 -.0398 .2182 .3702 .0424 -.1766 -.0357 -.1816 -.2155  
 180.000 .0820 .0820 -.2518 -.3251 -.4054 .0031 .0221 .3704 .2515 -.1936 -.0272 -.1280 -.1494  
 210.000 .5802 .0623 -.2564 -.3269 -.4039 .0245 .2011 .3612 .3019 -.2468 .0005 .1121 .1435  
 240.000 1.0010 .5961

W/L 7460 .6530 .9260

Q1  
 .000 -.0442 .0661 -.0126  
 30.000 -.0432 .0645 -.0029  
 60.000 -.0366 .1195 .0542  
 90.000 .0163 .1295  
 120.000 .0563 .0332 .2278  
 150.000 .0461 .1571 .1715  
 180.000 .0303 .1426 .1039  
 210.000 .0559 .1590 .1679  
 240.000 .0601 .1618 .1524

ARC11-716 IAI14 01+112+512N25+AT11 EXTERNAL TANK (R81177)

MACH (3) = 1.100 ALPHAO(4) = 4.080

## SECTION 1: EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PM1															
.000	1.2270	1.0820	.6773	.1785	-.1255	-.2572	-.3453	-.2942	.2291	.1831	-.0256	-.1271	-.0836	.0336	.0433
30.000			.6594	.1594	-.1990	-.2701	-.3564	-.3047	.2403	.1416	-.0905	-.1363	-.0526	.0244	.0323
60.000			.6177	.1176	-.2281	-.2938	-.3895	-.3664	.3325	-.0610	-.1641	-.0987	-.0081	.0193	.0174
90.000		.9796	.5665	.0736	-.2640	-.3313	-.4082	.1765	.5580		-.4846	-.1762	-.0255	-.0492	-.0440
120.000			.5191	.0313	-.2961	-.3620	-.4236	.0111	.2793	-.2159	-.3004	-.1087	.0712	.0051	-.0670
135.000								-.0883		.0831		-.2561		-.0105	
150.000			.4964	.0142	-.3189	-.3782	-.4540	-.0276	.1644	.2907	.0399	-.2645	-.0140	-.1019	-.1335
165.000				.0084	-.3199	-.3820	-.4558	-.0051	.1032	.3035	.2559	-.1714	-.0122	-.0492	-.0734
180.000	1.2270	.9022	.4812	.0031	-.3204	-.3865	-.4591	-.0140	.1183	.3078	.3119	-.3190	-.0114	-.0384	-.0672
270.000		.9847							.5603						

K/LT .7480 .8530 .9280

## PM1

.000	-.0032	.0503	.0317
30.000	-.0058	.0743	.0284
60.000	-.0045	.114	.0692
90.000	.0244	.121	
120.000	.0640	.1605	.2183
135.000	.0767	.1945	.1882
150.000	.0575	.1838	.1301
165.000	.0874	.1974	.1846
180.000	.0922	.1953	.0639

MACH (3) = 1.099 ALPHAO(5) = 8.020

## SECTION 1: EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PM1															
.000	1.1040	1.1620	.7790	.2803	-.1014	-.1799	-.2733	-.2236	.2922	.2239	.0306	-.0430	.0151	.0361	.0352
30.000			.7590	.2436	-.1315	-.2123	-.2987	-.2490	.3086	.1953	-.0416	-.0364	.0054	.0313	.0483
60.000			.6469	.1543	-.2021	-.2750	-.3709	-.0980	.4663	.0247	-.0969	.0174	.0246	.0379	.0270
90.000		.9298	.5347	.0551	-.2862	-.3527	-.4043	.1671	.4691		-.3532	-.0361	.0418	-.0194	-.0155
120.000			.4439	-.0273	-.3482	-.4103	-.4763	-.0751	.1410	-.1156	-.4066	-.1427	.0400	.0342	-.0048
135.000								-.1151		.0744		-.2662		.0109	
150.000			.4018	-.0802	-.3703	-.4273	-.4141	-.1154	.1090	.2600	.0132	-.3077	-.0400	-.0686	-.0704
165.000				-.0818	-.3834	-.4331	-.2013	-.0774	.3368	.2837	.2224	-.1670	-.0054	-.0078	-.0058
180.000	1.1840	.7923	.3778	-.0892	-.3806	-.4379	-.2595	-.0851	.0314	.2995	.2931	-.3856	-.0156	-.0001	-.0019
270.000		.9393							.4659						

K/LT .7480 .8530 .9280

## PM1

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - V/L. 9

ARC11-716 1A14 Q1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH ( 3 ) = 1.099 ALPHA0( 5 ) = 8.020

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
FHI			
.000	.0357	.0543	.0722
30.000	.0306	.0706	.0453
60.000	.0196	.1034	.0456
90.000	.0547	.0855	
120.000	.1060	.1981	.1938
135.000	.0970	.2130	.1715
150.000	.0814	.1994	.1114
165.000	.1165	.2202	.2245
180.000	.1193	.2189	.0722

MACH ( 4 ) = 1.248 ALPHA0( 1 ) = -7.940

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
FHI															
.000	1.2480	8450	.4353	-.0054	-.2678	-.3181	-.3737	-.3333	.0061	.1097	-.0034	-.2034	-.2005	-.0383	.0153
30.000			.4505	.0084	-.2616	-.3157	-.3696	-.3233	-.0456	.0072	-.1515	-.2384	-.1471	-.0687	-.0331
60.000			.5021	.0523	-.2370	-.2901	-.3614	-.296	.0509	-.3713	-.5191	-.2426	-.2294	-.0740	-.0109
90.000		.9952	.5928	.1359	-.1790	-.2414	-.3134	-.0301	.5352	-.2559	-.2953	-.2027	-.0671	-.0795	
120.000			.7029	.2319	-.1045	-.1721	-.2506	-.1931	.4994	.2644	.2738	.1567	.0103	.0014	-.1685
135.000			.7913	.3081	-.0452	-.1129	-.2055	-.1677	.3529	.5625	.1767	-.0348	-.0444	-.1754	-.2175
150.000			.3413	-.0144	-.0877	-.1779	-.1422	.0004	.5821	.3822	.0318	.0306	-.0742	-.1071	
180.000	1.2480	1.2420	.8408	.3517	-.0087	-.0902	-.1687	-.1162	.1849	.5036	.4816	.0551	.1038	-.0855	-.1511
270.000		.9898						.5246							

X/LT	.7460	.8530	.9280
FHI			
.000	-.0174	-.0149	-.0194
30.000	-.0508	-.0289	.0289
60.000	-.0418	.0058	.1646
90.000	-.0732	.0466	
120.000	-.0908	.0095	.1322
135.000	-.0342	.0626	.0783
150.000	-.1033	.0406	.0506
165.000	-.0825	.0733	.2809
180.000	-.0486	.0723	.2056

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DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4456

ARC11-716 1A14 01+112+S12N25+AT11 EXTERNAL TANK

(R81717)

MACH (4) = 1.246 ALPHA(2) = -3.840

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.3000	.9324	.5330	.0750	-.2213	-.2735	-.3411	-.3011	-.1222	.1684	.0148	-.1715	-.2425	-.0597	.0222
30.000		.5426	-.0830	-.2153	-.2696	-.3348	-.2924	.0238	.0808	-.1327	-.2203	-.1281	-.0676	-.0132	
60.000		.5748	.1070	-.1974	-.2551	-.3295	-.2629	.2098	-.2013	-.4296	-.1485	-.0777	-.1472	-.0256	
90.000		1.0440	.6237	.1553	-.1652	-.2286	-.3037	.2145	.5834	-.4913	-.3061	-.1583	-.0489	-.0690	
120.000			.6791	.2003	-.1314	-.1958	-.2734	-.2413	.3724	.1361	-.0705	.1344	-.0106	.0025	-.1569
150.000				.7154	.2275	-.1059	-.1678	-.2582	-.2237	.3361	.0366	-.0298			
165.000				.2441	-.0916	-.1584	-.2434	-.2106	.2473	.4120	.3303	-.0345	-.0390	-.0683	-.1247
180.000	1.3000	1.1570	.7365	.2480	-.0896	-.1579	-.2384	-.1827	.1511	.3822	.4237	-.0080	.0843	-.0418	-.1268
270.000		1.0400							.5884						
X/LT	.7460	.8530	.9280												

PHI

.000	-.0106	-.0114	.0038												
30.000	-.0355	-.0122	.0140												
60.000	-.0187	.0302	.1221												
90.000	-.0756	.0800													
120.000	-.0721	.0517	.1894												
135.000	-.0537	.1137	.1383												
150.000	-.0807	.0959	.0601												
165.000	-.0472	.1239	.2784												
180.000	-.0401	.1273	.1873												

MACH (4) = 1.244 ALPHA(3) = .050

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.3190	1.0320	.6318	.1520	-.1603	-.2233	-.2956	-.2632	-.1835	.2125	.0422	-.1391	-.1919	-.0795	.0119
30.000		.6337	.6337	.1520	-.1614	-.2257	-.2930	-.2637	.0622	.1567	-.0853	-.1593	-.1204	-.0687	.0048
60.000		.6303	.6303	.1515	-.1616	-.2236	-.3016	-.2400	.3025	-.0754	-.2709	-.1699	-.0363	-.0355	-.0000
90.000		1.0390	.6327	.1562	-.1614	-.2251	-.2977	-.2355	.6129	-.4584	-.4129	-.2945	-.0910	-.0000	
120.000			.6311	.1575	-.1601	-.2231	-.2940	-.2354	.3810	.0073	-.0617	-.1460	-.0137	.0147	-.0995
150.000			.6368	.1622	-.1590	-.2210	-.3029	-.2541	.2183	.2183	-.1635	-.1760	-.1676	-.0598	-.1963
165.000			.1561	.1561	-.1575	-.2192	-.2974	-.2630	.1913	.3007	.0711	-.1760	-.1676	-.0598	-.1963
180.000	1.3190	1.0640	.6353	.1637	-.1577	-.2218	-.2963	-.2372	.1892	.3387	.3272	-.0545	-.1106	-.0434	-.1006
270.000		1.0610							.1129	.3217	.3901	-.0702	-.1270	-.0398	-.0805
X/LT	.7460	.8530	.9280						.5218						

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01-712+512N25+AT11: EXTERNAL TANK (R01117)

WACH ( 4 ) = 1.244 ALPHA( 3 ) = .035

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI	.000	.0042	.0040	.0155
30.000	-.0034	.0105	.0251	
60.000	-.0265	.0370	.0733	
90.000	-.0229	.0773		
120.000	-.0318	.0925	.2686	
135.000	-.0124	.1301	.2002	
150.000	-.0308	.1541	.0917	
165.000	-.0018	.1714	.2584	
180.000	.0069	.1721	.1698	

WACH ( 4 ) = 1.249 ALPHA( 4 ) = 4.010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI	.0000	1.3040	1.1440	.7327	.2439	-.0922	-.1580	-.2339	-.2052	.2779	.0880	-.0993	-.1257	-.0587	-.0059
30.000				.7152	.2298	-.1021	-.1696	-.2451	-.2141	.1789	-.0111	-.1030	-.1069	-.0566	-.0057
60.000				.6741	.1931	-.1298	-.1909	-.2764	-.2391	.0440	-.1466	-.1299	-.0142	-.0259	-.0138
90.000			1.0410	.6239	.1587	-.1619	-.2251	-.3000	-.2262	.5742	-.4145	-.2077	-.0291	-.0647	-.0752
120.000				.5752	.1138	-.1938	-.2526	-.3213	-.2697	.2228	-.1126	-.2912	-.0105	.0472	-.0265
135.000					.0898	-.2094	-.2663	-.3375	-.2795	.0704	-.2651	-.2225	-.2483	-.0030	-.0720
150.000					.0830	-.2172	-.2708	-.3402	-.3005	.2592	.2245	-.0284	-.1981	-.0046	-.0268
165.000		1.3040	.9628	.5379	.0772	-.2161	-.2723	-.3386	-.2540	.2375	.3713	-.1202	-.1976	.0286	-.0215
180.000			1.0430												

X/LT .7460 .8330 .9280

PHI	.0000	.0170	.0252	.0475
30.000		.0138	.0335	.0632
60.000		.0065	.0597	.1131
90.000		-.0056	.0800	
120.000		.0180	.1590	.3014
135.000		.0290	.2104	.2554
150.000		.0142	.2101	.1841
165.000		.0321	.2233	.2316
180.000		.0615	.2194	.1833

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1117)

ARC11-716 1A14 01+712+S12N25+AT11 EXTERNAL TANK

MACH ( 4 ) = 1.249 ALPHA( 5 ) = 7.930

DEPENDENT VARIABLE C<sub>P</sub>

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI	1.2620	1.2240	.8317	.3412	-.0155	-.0886	-.1708	-.1427	-.0891	.3544	.1502	-.0393	-.0515	-.0046	.0067
30.000			.7926	.3079	-.0417	-.1153	-.1934	-.1666	-.0193	.2890	.0508	-.0470	-.0435	-.0145	-.0002
60.000			.7027	.2245	-.1070	-.1716	-.2596	-.1902	.4772	.1285	-.1172	-.0287	-.0007	-.0077	.0025
90.000		.9931	.5951	.1367	-.1789	-.2427	-.3024	-.1850	.5180		-.3383	-.1214	.0145	.0116	-.0038
120.000			.5060	.0806	-.2354	-.2925	-.3589	-.2971	.0894	-.1750	-.3460	-.2424	-.0193	.0410	.0135
135.000								-.3157		-.0411		-.3227		.0451	
150.000			.4669	.0199	-.2590	-.3106	-.3746	-.3186	.1321	.1761	.1115	-.3031	-.2339	.0171	-.0396
165.000				.0063	-.2709	-.3179	-.3814	-.2808	.0459	.1946	.2906	-.0193	-.2040	.0229	.0208
180.000	1.2620	.8570	.4411	-.0010	-.2669	-.3207	-.3793	-.1775	.0485	.1925	.3476	-.1640	-.2037	.0323	.0250
270.000		1.0010							.5327						

X/LT .7480 .8530 .9280

PHI	.000	.0203	.0545	.0916
30.000		.0226	.0642	.0819
60.000		.0268	.0838	.0879
90.000		.0506	.0882	
120.000		.0839	.1998	.2354
135.000		.0831	.2312	.2283
150.000		.0839	.2200	.1361
165.000		.1005	.2367	.3324
180.000		.1083	.2328	.2004



ARC11-716 1A14 01+712+S12N25+AT11 EXTERNAL TANK

(R01Y10) (02 OCT 73)

## REFERENCE DATA

SREF = 2.4210 SQ. FT.      XWRP = 29.5800 INCHES  
LREF = 38.7090 INCHES      YWRP = .0000 INCHES  
BREF = 38.7090 INCHES      ZWRP = .0000 INCHES  
SCALE = .0000 SCALE

ALPHA	=	.000	ELEV	=	.000
RUDDER	=	.000	SPOBRK	=	.000

### PARAMETRIC DATA

$$\text{MACH} (1) = .298 \quad \text{BETA} (1) = -8.363$$

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

PK\LT	.0000	.0080	.0160	.1130	.1780	.1940	.2150	.2420	.2920	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
30.000	1.5480	.7572	.3477	-1.743	-.5242	-.3469	-.1634	-.0559	-.0325	-.1603	-.2313	-.1296	-.0911	-.0857	-.0754
60.000			.4686	-.0339	-.4062	-.4167	-.1862	-.0409	-.0389	-.3440	-.2312	-.1311	-.0904	-.0774	-.0436
90.000			.5769	.0304	-.2794	-.2420	-.0535	-.0935	.0760	-.6346	-.4491	-.1131	.0354	.0052	-.0058
120.000	1.0390		.6269	.1014	-.2143	-.1475	.0907	.2781	.4095	-.6115	-.3213	-.1129	-.0706	-.0329	
150.000			.5929	.0753	-.2471	-.1984	-.0111	.1427	.1661	-.4264	-.1521	.0669	-.0089	-.0356	-.0371
180.000								.0775	.0224			-.0214		-.0629	
210.000			.5192	-.0904	-.3279	-.2998	-.0932	.0470	.0906	.2340	.1704	-.2056	-.2104	-.1557	-.0177
240.000				-.0711	-.4057	-.3812	-.0907	.0110	.0983	.2680	.1795	-.2473	-.1759	-.1567	-.0094
270.000	1.0480	.8494	.3811	-.1355	-.4586	-.4228	-.1193	.0377	.1242	.2683	.1338	-.5320	-.4124	-.2092	-.0434
300.000		.6222							.4838						

PHI	.000	-.0639	-.0771	-.3011
30.000	-.0334	-.0355	-.2710	
60.000	.0130	.0303	-.1352	
90.000	-.0149	-.1010		
120.000	.1424	.0799	.3063	
135.000	.1326	.1673	.3113	
150.000	.1101	.1591	.2055	
165.000	.1244	.1630	.3474	
180.000	.0913	.1236	.0666	

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MACH ( 1 ) = .898      BETAO ( 2 ) = -4.010

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## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

DATE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399
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ARC11-716 1A14 01+T12+S12N25+AT11 EXTERNAL TANK

(R81T18)

MACH ( 1 ) = .898 BETA0 ( 2 ) = -4.010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000															
180.000	1.1070	.8655	.4102	-.0863	-.4372	-.3596	-.0869	.0547	.1373	.2745	.1461	-.4003	-.2070	-.1822	-.0008
270.000	.7413			-.1211	-.4669	-.3317	-.0762	.0638	.1536	.2674	.1548	-.5816	-.1871	-.1764	-.0323

X/LT .7460 .8330 .9280

PHI

	.000	-.0163	-.0305	-.2439
30.000		-.0051	-.0068	-.2347
60.000	.0153	.0353	-.1230	
90.000	.0384	.0261		
120.000	.1042	.0419	.2088	
135.000	.1129	.1273	.2301	
150.000	.0835	.1154	.1117	
165.000	.1097	.1359	.2610	
180.000	.0954	.1094	.0254	

MACH ( 1 ) = .897 BETA0 ( 3 ) = .030

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1240	.8359	.3891	-.1410	-.4908	-.5440	-.0936	.0050	.0145	-.1423	-.1718	-.0971	-.0407	-.0239	-.0149
30.000			.3948	-.1401	-.4908	-.5401	-.0874	.0308	.0410	-.2073	-.1883	-.1196	-.0579	-.0429	-.0221
60.000			.3963	-.1393	-.4795	-.3132	-.0238	.1320	.1450	-.5323	-.4883	-.2074	.0031	-.0047	-.0012
90.000		.8539	.4061	-.1264	-.4594	-.3511	.0822	.2873	.4395	-.7106	-.7106	-.0315	.0058	-.0996	-.0610
120.000			.4095	-.1195	-.4609	-.2158	.0072	.1722	.2275	-.3235	-.2020	-.0683	-.0991	-.1191	-.0079
135.000								.0171	.2275	.0171		-.1521		-.1410	
150.000			.4201	-.1105	-.4494	-.2963	-.0601	.0957	.1622	.2074	-.1384	-.3596	-.2608	-.2265	-.0639
165.000				-.1104	-.4516	-.3657	-.0711	.0699	.1558	.2664	.0840	-.5160	-.1929	-.1916	-.0233
180.000	1.1240	.8655	.4169	-.1126	-.4494	-.3848	-.0589	.0704	.1565	.2585	.1674	-.6019	-.1734	-.1739	-.0131
270.000	.8490							.4583							

X/LT .7460 .8330 .9280

PHI

	.000	-.0002	-.0196	-.2512
30.000		.0011	-.0047	-.2256
60.000	.0162	.0258	-.1061	
90.000	.0211	.0485		
120.000	.0701	.0272	.1033	
135.000	.0730	.0592	.0678	
150.000	.0273	.0372	-.0126	



TABULATED PRESSURE DATA - IA14A - VOL. 9

DATE 06 JAN 75

ARC11-716 IA14 Q1-T12+S12N25\*AT11 EXTERNAL TANK (RB1718)

MACH ( 1 ) = .897 BETAO ( 3 ) = .030

DEPENDENT VARIABLE C<sup>2</sup>

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

165.000 .0673 .0688 .0557  
180.000 .0750 .0717 -.1235

MACH ( 1 ) = .898 BETAO ( 4 ) = 4.100

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

.000 1.1040 .8132 .3789 -.1554 -.5009 -.5498 -.0985 -.0062 -.1549 -.2179 -.1035 -.0517 -.0380 -.0289  
30.000 .3232 -.2036 -.5284 -.5846 -.0598 .0489 .0607 -.1726 -.2276 -.1055 -.0577 -.0532 -.0328  
60.000 .2962 -.2303 -.5576 -.3249 .0039 .1497 .1726 -.4777 -.5008 -.1925 -.0291 -.0313 -.0135  
90.000 .7427 .2889 -.2352 -.5501 -.2476 .1025 .3037 .4599 -.6849 .1085 -.0373 -.1356 -.0937  
120.000 .3059 -.2169 -.5339 -.2106 .0202 .1832 .2551 -.2564 -.1781 -.1038 -.1292 -.1332 -.0294  
135.000 .3486 -.1791 -.5079 -.3390 -.0509 .0967 .1266 .1783 .0364 .1920 .1570  
150.000 .1418 -.4811 -.4343 -.0761 .0614 .1551 .1817 -.2293 .4467 .3513 .2605 .0736  
165.000 .4112 -.1206 -.4541 -.4465 -.0784 .1391 .2493 .3235 .6038 .1816 .1659 .0498  
180.000 .8667 .9502 .4221

X/LT .7460 .8530 .9280

PHI

.000 -.0140 -.0276 -.2421  
30.000 -.0096 -.0172 -.2515  
60.000 .0026 .0091 -.1076  
90.000 -.0095 .0170 .0006  
120.000 .0396 .0122 .0006  
135.000 .0455 .0367 .0597  
150.000 -.0040 .0301 .1815  
165.000 .0900 .0512 .0758  
180.000 .0557 .0593 .1237

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ARC11-716 IAI4 01+712+812MS+AT11 EXTERNAL TANK

(RB1716)

MACH ( 1 ) = .978 BETAO ( 1 ) = -8.050

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.8380
PHI	.000	1.0470	.7571	.3419	-.1790	-.5200	-.5589	-.1685	-.0560	-.1763	-.2421	-.1382	-.0912	-.0846	-.0741
30.000				.2457	-.2699	-.5874	-.5394	-.0460	.0356	-.1452	-.2784	-.1061	-.0562	-.0642	-.0323
60.000				.2906	-.3260	-.6142	-.2391	.5316	.1708	-.4308	-.4637	-.1973	-.0620	-.0516	-.0355
90.000				.6286	.1800	-.3247	-.6252	-.0966	.1073	.4817	-.6256	.1059	-.1060	-.1997	-.1678
120.000					.2927	-.3052	-.5952	-.1666	.0316	.1803	-.2003	-.1270	-.1790	-.1693	-.0903
135.000									.1287	.0393	-.2214			-.1948	
150.000					.2597	-.2573	-.5655	-.7373	-.0540	.0899	-.3659	-.4822	-.3516	-.2597	-.1173
165.000					-.1878	-.5159	-.5036	-.0988	.0271	.1298	-.0140	-.6080	-.2255	-.2297	-.1091
180.000					.3821	-.1380	-.4621	-.4841	-.1023	.0956	.1336	-.4586	-.2673	-.2639	-.1208
270.000									.4107						

X/LT .7460 .8530 .9280

PHI

.000	-.0600	-.0727	-.2939
30.000	-.0303	-.0362	-.2627
60.000	-.0174	-.0194	-.1241
90.000	-.0898	-.0479	
120.000	.0074	-.0268	-.0189
135.000	.0106	.0226	-.0819
150.000	-.0474	-.0571	-.1836
165.000	.0032	.0162	.0914
180.000	-.0127	.0091	-.1208

MACH ( 2 ) = .978 BETAO ( 1 ) = -8.050

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.8380
PHI	.000	1.0940	.8216	.4182	-.0935	-.4484	-.5186	-.4738	-.0132	.0247	-.0948	-.3010	-.2659	-.0608	-.0331
30.000				.5345	.0178	-.3565	-.4378	-.4900	.0096	.0354	-.2335	-.3043	-.1662	-.1295	-.0266
60.000				.5348	.1146	-.2806	-.3530	-.2912	.1676	.1647	-.4735	-.4523	-.1891	-.1342	.0187
90.000				1.0840	.6805	-.1625	-.2425	-.3176	.1518	.3401	.4779	-.5981	-.6035	-.1518	-.0619
120.000					.6486	.1328	-.2649	-.3441	.0071	.2014	-.3465	-.1728	.1197	.0255	-.0828
135.000									.1445		-.0328	.0238		-.1084	
150.000					.9782	.0616	-.3262	-.4030	-.3652	.1281	.2280	.2189	-.1577	-.1844	-.0487
165.000					-.0126	-.3849	-.4568	-.4255	.1251	.1380	.3015	.2265	-.2007	-.1692	-.2468
180.000					.4463	-.0669	-.4305	-.4943	-.3844	.1675	.3130	.1831	-.4023	-.2167	-.2675
270.000									.0753						-.0748

X/LT .7460 .8530 .9280

PHI

.000	-.0600	-.0727	-.2939
30.000	-.0303	-.0362	-.2627
60.000	-.0174	-.0194	-.1241
90.000	-.0898	-.0479	
120.000	.0074	-.0268	-.0189
135.000	.0106	.0226	-.0819
150.000	-.0474	-.0571	-.1836
165.000	.0032	.0162	.0914
180.000	-.0127	.0091	-.1208



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-715 1A14 OR+T12+512M25+AT11 EXTERNAL TANK (R81118)

MACH ( 2 ) = .976 BETAO ( 1 ) = -8.036

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT .7480 .8530 .9280

PHI

.000	-.0147	.0014	-.1080
30.000	.0176	.0396	.1553
60.000	.0821	.1337	-.0241
90.000	.1259	.1034	
120.000	.1965	.1686	.3854
135.000	.2049	.2442	.3002
150.000	.1615	.2240	.3139
165.000	.1741	.2274	.3985
180.000	.1345	.1827	.1436

MACH ( 2 ) = .976 BETAO ( 2 ) = -4.010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT .0000 .0080 .0490 .1150 .1750 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.1470	.8752	.4503	-.0757	-.4368	-.5073	-.5111	.0162	.1110	-.0384	-.2841	-.3656	-.0021	-.0022	-.0019
30.000			.5035	-.0198	-.3951	-.4696	-.5138	.0774	.1079	-.1482	-.3064	-.2070	-.0507	-.0435	-.0278
60.000			.5517	.0270	-.3565	-.4194	-.3430	.2133	.2061	-.4308	-.4983	-.1876	-.1290	-.0346	.0272
90.000	1.0000		.5752	.0329	-.3334	-.4132	-.0659	.3641	.4927		-.0238	-.6650	-.2015	-.0761	.0192
120.000			.4597	.0411	-.3468	-.4197	-.1562	.2472	.2652	-.2892	-.2565	-.0106	-.0482	-.1448	-.0453
135.000								.2230	.0219			-.1170		-.1718	
150.000			.5311	.0097	-.3739	-.4403	-.3751	.1795	.1908	.2450	.0334	-.2039	-.1971	-.2659	-.0830
165.000				-.0275	-.3939	-.4680	-.2622	.0910	.1897	.3050	.1677	.3127	-.1871	-.2892	-.0560
180.000	1.1470	.9166	.4068	-.0563	-.4205	-.4675	-.1311	.0775	.2067	.3020	.1824	-.4292	-.1799	-.2556	-.0739
270.000		.7981													

X/LT .7480 .8530 .9280

PHI

.000	.0320	.0324	-.1635
30.000	.0394	.0636	-.1399
60.000	.0930	.1213	-.0411
90.000	.1219	.1317	
120.000	.1636	.1350	.2538
135.000	.1713	.2042	.2945
150.000	.1416	.1908	.2205
165.000	.1582	.2013	.3003
180.000	.1335	.1696	.0859



## TABULATED PRESSURE DATA - IA14A - VOL. 9

ARCI:-716 IA14 OL-T12-S12N23-AT11 EXTERNAL TANK (RB1118)

MACH ( 2 ) = .975 BETAO ( 3 ) = .040

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1620	.8879	.4543	-.0726	-.4303	-.5029	-.5634	.1331	-.0244	-.2776	-.3652	.0112	.0131	.0137
30.000				.4587	-.0686	-.4303	-.5042	-.4233	.1611	-.0916	-.3187	-.3320	-.0135	-.0072	.0016
60.000				.4590	-.0671	-.4268	-.4836	-.2235	.2366	-.3822	-.5097	-.2295	-.0497	-.0283	-.0030
90.000			.9034	.4644	-.0583	-.4216	-.4836	-.0479	.5068	-.6983	-.6983	-.5423	-.1582	-.0691	.0044
120.000				.4690	-.0523	-.4203	-.4689	-.2346	.3017	-.2219	-.2571	-.1163	-.1080	-.1772	-.0348
135.000								.1647	.0653	-.0653	-.1918	-.1918		-.2148	
150.000				.4762	-.0484	-.4178	-.4811	-.1200	.2349	.2428	-.1353	-.3547	-.2104	-.3144	-.0984
165.000					-.0481	-.4102	-.4871	-.1258	.2162	.2909	.0908	-.4194	-.1563	-.2508	-.0556
180.000	1.1620	.9158	.4734	-.0479	-.4167	-.4863	-.0694	.0258	.1962	.2909	.1891	-.4841	-.1415	-.2270	-.0597
270.000		.9016													.5126

X/LT .7460 .8530 .9280

PHI

.000	.0467	.0505	-.1990
30.000	.0445	.0570	-.1496
60.000	.0613	.0930	-.0657
90.000	.1028	.1141	
120.000	.1275	.0729	.1739
135.000	.1289	.1201	.1218
150.000	.0960	.1056	.0491
165.000	.1231	.1275	.0834
180.000	.1226	.1286	-.0621

MACH ( 2 ) = .976 BETAO ( 4 ) = 4.070

## SECTION ( 2 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1470	.8682	.4457	-.0766	-.4335	-.5061	-.5622	.1226	-.0389	-.2821	-.3600	-.0087	-.0036	.0012
30.000				.3939	-.1262	-.4655	-.5313	-.4452	.1713	-.0541	-.3426	-.3492	-.0006	-.0077	-.0005
60.000				.3620	-.1581	-.4833	-.5480	-.1245	.2920	-.3224	-.4799	-.2298	-.0388	-.0148	.0001
90.000		.6019	.3588	.1542	-.4931	-.5391	-.0339	.3292	.5296	-.6820	-.1522	-.0183	-.0624	-.0481	
120.000			.3752	-.1408	-.4768	-.5470	-.0806	.0676	.3519	-.1455	-.2166	-.1455	-.1366	-.1870	-.0444
135.000								.0238	.1113	-.1113	-.2293	-.2293		-.2209	
150.000			.4144	-.1147	-.4549	-.5248	-.0520	.0230	.2419	.2274	-.2114	-.4658	-.3102	-.3296	-.0782
165.000				-.0743	-.4335	-.5061	-.1085	.0375	.2173	.2793	.0749	-.5260	-.1709	-.2291	-.0793
180.000	1.1470	.9195	.4730	-.0494	-.4170	-.4883	-.1607	.0358	.1818	.2987	.2031	-.4506	-.1546	-.2704	-.0799
270.000		1.0000													.4924

X/LT .7460 .8530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAL14A - VOL. 9

ARC11-716 IAL4 01+T12+S12N25+AT11 EXTERNAL TANK (RB1110)

MACH ( 2 ) = .976 BETAG ( 4 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI  
.000 .0298 .0372 -.1583  
30.000 .0402 .0550 -.1531  
60.000 .0470 .0708 -.0451  
90.000 .0509 .0863  
120.000 .0659 .0651 .0344  
135.000 .942 .0872 -.0217  
150.000 .0634 .0277 -.1369  
165.000 .0915 .0965 .1018  
180.000 .0962 .1106 -.0668

MACH ( 2 ) = .974 BETAG ( 5 ) = 8.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2970 .3440 .3940 .4510 .5050 .5580 .6380  
PHI  
.000 1.0920 .8175 .4376 -.1005 -.4536 -.5232 -.6099 -.0389 .0481 -.1053 -.3030 -.2829 -.0628 -.0545 -.0587  
30.000 .3141 -.1909 -.5237 -.9741 -.2009 -.1026 .1438 -.0574 -.3476 -.2623 -.0125 -.0232 -.0245  
60.000 .2676 -.2349 -.5490 -.5592 -.1246 .0398 .2652 -.2937 -.4914 -.1832 -.0326 -.0335 -.0245  
90.000 .6898 .2541 -.2420 -.5566 -.6006 -.0560 .2101 .5540 .2652 -.6537 -.1338 -.0340 -.1043 -.1200  
120.000 .2738 .2222 .5476 .1629 .0882 .0555 .2480 .0909 .2685 .1982 .1925 .2037 .0923  
135.000 .3289 .1829 .5137 .2841 .0692 .0310 .1962 .2061 .2375 .5912 .3470 .3292 .1365  
150.000 .1284 .4751 .5421 .0693 .0275 .1559 .2518 .0485 .6711 .2323 .2527 .1417  
165.000 1.0920 .8032 .4452 .0746 .4343 .5063 .1290 .0604 .1101 .2600 .1911 .4591 .2742 .3386 .1470  
180.000 1.0850 .9280 .4712

X/LT .7460 .6530 .9280  
PHI  
.000 -.0178 -.0090 -.1926  
30.000 .0127 .0106 -.1725  
60.000 .0171 .0364 -.0617  
90.000 -.0308 .0184  
120.000 .0316 .0304 .0206  
135.000 .0250 .0666 -.0311  
150.000 .0051 -.0083 -.1402  
165.000 .0202 .0614 .1490  
180.000 .0068 .0518 -.0815

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ARC11-716 1A.4 O4-T12+S12N25+AT11 EXTERNAL TANK (R81718)

MACH (3) = 1.102 BETAO (1) = -8.090

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.1790	.9218	.5380	.0570	-.2791	-.7464	-.4203	-.3438	.1326	.0478	-.1358	-.1783	-.1727	-.0813	-.0593
30.000			.6435	.1951	-.2010	-.2769	-.3567	-.2176	.1124	-.0926	-.2574	-.0994	-.1048	-.1253	-.0684
60.000			.7384	.2412	-.1310	-.2049	-.2421	.1705	.2572	-.2948	-.3169	-.1372	-.1329	.0105	.0142
90.000		1.1690	.7812	.2880	-.0965	-.1752	-.2506	.4066	.5648		-.5195	-.4043	-.1531	-.0340	-.0119
120.000			.7511	.2616	-.1188	-.1960	-.2661	.1861	.3120	-.1993	-.0919	.2310	.1572	.0331	-.0295
150.000							.0802					.1204		.0249	
180.000			.6867	.1958	-.1702	-.2456	-.3418	-.2323	.1952	.3076	.2557	-.0388	-.0263	-.1008	-.0769
190.000				.1266	-.2244	-.2963	-.3790	-.2906	.1908	.3752	.3162	-.0288	-.0151	-.1315	-.1058
190.000	1.1790	.9976	.5659	.3773	-.2572	-.3251	-.3979	-.1478	.1870	.3959	.2868	-.1781	-.1033	-.2289	-.1451
270.000		.7983							.6899						

K/LT .7480 .8530 .9280

## PM1

.000	-.0440	.0381	-.0531
30.000	-.0234	.0920	-.0290
60.000	.0331	.1921	.0983
90.000	.0809	.1492	
120.000	.1443	.2242	.4735
150.000	.1515	.3021	.4523
180.000	.1298	.2635	.4061
190.000	.1384	.2784	.4735
190.000	.1022	.2311	.2324

MACH (3) = 1.100 BETAO (2) = -4.010

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.2200	.9656	.5631	.0808	-.2883	-.3359	-.4122	-.3577	.1723	.1207	-.1047	-.2213	-.1088	.0179	-.0036
30.000			.8120	.1140	-.2316	-.3047	-.3828	-.3171	.1918	.0099	-.1866	-.1414	-.0861	-.0297	-.0356
60.000			.6588	.1361	-.2008	-.2708	-.3233	-.0183	.2945	-.2403	-.3583	-.0986	-.0786	-.0849	.0113
90.000		1.0850	.6780	.1800	-.1842	-.2581	-.3425	.2861	.5733		-.5015	-.4725	-.1449	-.0635	-.0290
120.000			.6458	.1724	-.1936	-.2688	-.3515	.0947	.3581	-.1308	-.0891	.0998	.0689	-.0077	-.0743
150.000							-.2802					-.0095		-.0156	
180.000			.6401	.1423	-.2193	-.2851	-.3726	-.2958	.2806	.3527	.1349	-.0871	-.0294	-.1332	-.1321
190.000				.1063	-.2380	-.3080	-.3926	-.2266	.2340	.4054	.2793	-.1029	-.0379	-.1372	-.1145
190.000	1.2200	1.0070	.5784	.0785	-.2512	-.3245	-.4003	-.0417	.1915	.3849	.3120	-.1900	-.0393	-.1186	-.1247
270.000		.8940													

K/LT .7480 .8530 .9280

## PM1



ARCH: 716 IAL14 D1-T12-S12N25+AT11 EXTERNAL TANK (R01718)

MACH (3) = 1.100 BETAO (2) = -4.010

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7480 .8530 .9280

PWT

.000	-.0412	.0671	-.0350
30.000	-.0461	.0860	-.0561
60.000	-.0536	.1162	-.0668
90.000	-.0549	.1474	
120.000	-.0720	.1521	.3604
135.000	.0802	.2324	.3614
150.000	.0717	.2252	.2097
165.000	.0837	.2334	.3645
180.000	.0658	.2022	.1766

MACH (3) = 1.102 BETAO (3) = .030

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580

PWT

.000	1.2390	.9827	.5886	.0675	-.2612	-.3203	-.4054	-.3340	.1604	.1499	-.0701	-.2033	-.0703	.0449	.0808
30.000			.5725	.0680	-.2600	-.3306	-.4032	-.3309	.1517	.0998	-.1429	-.2176	-.0362	.0318	.0084
60.000			.5716	.0703	-.2574	-.3240	-.4109	-.0429	.3282	-.1888	-.3331	-.0992	-.0078	-.0147	-.0370
90.000		.9965	.5786	.0814	-.2546	-.3220	-.4027	.1000	.5921	-.5239	-.4500	-.1293	-.0765	-.0765	-.0445
120.000			.5814	.0863	-.2544	-.3215	-.3791	-.0432	.3952	-.0625	-.0657	.0337	.0175	-.0325	-.1282
135.000							-.1042		.2012	.2012	-.0476			-.0811	
150.000			.5896	.0855	-.2511	-.3157	-.4050	-.1071	.2469	.3734	.0216	-.1772	-.0541	-.1872	-.2090
165.000				.0887	-.2452	-.3177	-.3978	-.0558	.2158	.3773	.2560	-.1874	-.0270	-.1319	-.1471
180.000	1.2390	1.0090	.5893	.0895	-.2516	-.3177	-.3985	-.0294	.1946	.3554	.3331	-.2378	-.0001	-.1184	-.1428
270.000		.9914							.5971						

K/LT .7480 .8530 .9280

PWT

.000	-.0385	.0673	-.0109
30.000	-.0420	.0719	-.0078
60.000	-.0339	.1071	.0456
90.000	.0232	.1173	
120.000	.0618	.0918	.2309
135.000	.0326	.1343	.1735
150.000	.0312	.1387	.1035
165.000	.0560	.1387	.1892
180.000	.0593	.1809	.0754

ARC11-715 IAI4 CR-712-312425-AT111 EXTERNAL TANK

(RB1710)

MACH (3) = 1.100 BETAD (4) = 4.090

## SECTION (1) INTERNAL TANK

## DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6360
PMI															
.000	1.2220	.9655	.5900	.0641	-.2690	-.3336	-.4111	-.3397	.1204	.1345	-.0966	-.2242	-.1105	.0874	.0009
30.000			.9111	.0299	-.2981	-.3610	-.4299	-.3451	.2332	.1168	-.0640	-.2547	-.0988	.0243	-.0087
60.000			.4835	.0057	-.2153	-.3725	-.4524	-.0130	.3684	-.1222	-.0537	-.1483	-.0329	-.0026	-.0239
90.000			.9005		.0133	-.3161	-.2338	.0067	.6169		-.9099	-.1032	-.0324	-.0541	-.0794
120.000			.4933	.0154	-.2131	-.3741	-.4393	.0181	.3623	.0098	-.2425	-.0119	-.0403	-.1115	-.1487
150.000								.0129		.2415		-.0960		-.1902	
180.000			.5287	.0353	-.2899	-.3503	-.396	.0183	.1516	.3070	-.0285	-.3355	-.1483	-.2931	-.2217
210.000				.0619	-.2600	-.3366	-.4190	.0236	.1921	.3290	.2259	-.2901	-.0403	-.1333	-.1469
240.000	1.2220	1.0120	.5341	.0556	-.2525	-.3181	-.4031	-.0221	.2100	.3422	.3375	-.2404	-.0070	-.1697	-.1359
270.000		1.0890							.2100						.5719

M/LT .7400 .8330 .9280

PMI

.000	-.0434	.0394	-.0267
30.000	-.0298	.0868	-.0198
60.000	-.0247	.1012	.0984
90.000	.0094	.1203	
120.000	.0233	.0919	.0638
150.000	.0066	.0676	.0229
180.000	-.0011	.0618	-.0717
210.000	.0229	.1109	.1569
240.000	.0303	.1313	.0722

MACH (3) = 1.100 BETAD (3) = 8.130

## SECTION (1) INTERNAL TANK

## DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6360
PMI															
.000	1.1780	.9172	.5329	.0500	-.2816	-.3464	-.4234	-.3772	.0953	.0444	-.1483	-.1842	-.1978	-.0771	-.0326
30.000			.4439	.0280	-.3423	-.4016	-.4657	-.1880	.1145	.0934	-.1626	-.2905	-.1034	-.0141	-.0042
60.000			.4028	-.0621	-.3663	-.4176	-.4783	-.0232	.2990	-.0832	-.3156	-.1950	-.0571	-.0318	-.0270
90.000			.7984		-.0764	-.3891	-.4269	-.4688	.0546	.6155	-.9793	-.2121	-.0540	-.0999	-.0751
120.000			.4064	-.0406	-.3633	-.4183	-.1063	-.0561	.1324	.0999	-.0887	-.0887	-.1111	-.1777	-.1610
150.000								-.0290		.1448		-.1898		-.2148	
180.000			.4565	-.0216	-.3349	-.3960	-.0764	-.0124	.1800	.2831	-.0473	-.4648	-.2374	-.3795	-.2032
210.000			.0250	-.3012	-.3646	-.4346	-.0111	.1394	.2864	.2864	.1755	-.4501	-.0899	-.2020	-.2075
240.000	1.1780	.9143	.5638	.0744	-.2655	-.3322	-.4139	-.0232	.1333	.2943	.2902	-.2359	-.1091	-.2736	-.2344
270.000		1.1070							.1333						.9807

M/LT .7400 .8330 .9280

PMI



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ARC11-716 1A14 CR+T12+S12N25+AT.1 EXTERNAL TANK (RB1716)

MACH ( 3 ) = 1.100 BETA0 ( 5 ) = 0.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8330	.9280
CHI			
.000	-.0492	.0437	-.0543
30.000	-.0323	.0736	-.0393
60.000	-.0382	.0946	.0757
90.000	-.0336	.0910	
120.000	-.0157	.0647	.0982
135.000	-.0349	.0859	.0453
150.000	-.0370	.0427	-.1003
165.000	-.0263	.0657	.2039
180.000	-.0337	.0693	-.0349

MACH ( 4 ) = 1.232 BETA0 ( 1 ) = -0.080

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
CHI															
.000	1.2330	.9780	.5864	.1245	-.1849	-.2429	-.3113	-.2879	-.1908	.1213	-.0456	-.1528	-.1634	-.1682	-.0783
30.000			.6943	.2149	-.1115	-.1786	-.2528	-.2235	.0861	-.0711	-.2801	-.1033	-.0890	-.1047	-.1002
60.000			.7900	.3014	-.0449	-.1128	-.2035	-.1349	.3133	-.1383	-.3367	-.1653	-.1634	-.0443	.0269
90.000		1.2350	.8353	.3464	-.0124	-.0831	-.1729	.1111	.6174	-.4448	-.4296	-.2469	-.2469	-.0815	-.0183
120.000			.8041	.3210	-.0332	-.1039	-.1892	-.1241	.3273	-.0937	-.1619	.0096	.2285	.1903	.0133
135.000								-.1634		-.0429		.0196		.1456	
150.000			.7376	.2566	-.0826	-.1487	-.2370	-.1911	.1523	.1683	.1951	-.0265	.0367	.0127	-.0454
165.000			.1937	-.1310	-.1971	-.2736	-.2401	.0240	.0240	.4127	.3105	.0998	-.1331	-.0605	-.0799
180.000	1.2330	1.0370	.6150	.1510	-.1638	-.2234	-.2934	-.2341	-.0326	.4342	.2973	.0054	-.1802	-.0611	-.0920
270.000		.8460							.6623						

X/LT	.7460	.8330	.9280
CHI			
.000	-.0341	-.0123	-.0002
30.000	-.0428	.0214	.0382
60.000	.0006	.1096	.1526
90.000	-.0277	.0592	
120.000	-.0207	.2054	.5091
135.000	.0180	.2865	.4786
150.000	.0261	.2867	.4319
165.000	.0350	.2828	.5106
180.000	.0518	.2461	.3112

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ARC11-716 IAI4 01+T12+S12N23+AT11 EXTERNAL TANK (R81T10)

MACH ( 4 ) = 1.244 BETA0 ( 2 ) = -4.030

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	1.3020	1.0300	.6200	.1468	-.1714	-.2325	-.3034	-.2740	-.2041	.2017	.0184	-.1487	-.1778	-.1151	-.0046
30.000			.6696	.1885	-.1368	-.2028	-.2734	-.2420	.0907	.0494	-.1647	-.1450	-.0871	-.0799	-.0446
60.000			.7151	.2242	-.1047	-.1684	-.2563	-.1907	.3158	-.1214	-.3380	-.1517	-.0538	-.1052	-.0191
90.000	1.1530		.7373	.2476	-.0893	-.1559	-.2404	-.1592	.6066		-.4536	-.4369	-.3035	-.0749	-.0606
120.000			.7247	.2394	-.0977	-.1624	-.2428	-.1779	.3430	-.0477	-.1245	-.0568	.1139	.0651	-.0658
135.000								-.2043		.1008		-.1114		.0899	
150.000			.6969	.2142	-.1162	-.1517	-.2676	-.2186	.1746	.3693	.1667	-.0808	-.0831	-.0383	-.0839
165.000				.1862	-.1409	-.2047	-.2827	-.2461	.1419	.4038	.2963	.0448	-.0924	-.0970	-.0623
180.000	1.3020	1.0690	.6373	.1607	-.1547	-.2203	-.2925	-.2498	.0953	.3214	.3456	-.0059	-.2334	-.0850	-.1216
270.000		.9551							.6433						

X/LT .7460 .8530 .9280

## PHI

.000	-.0143	-.0165	-.0027
30.000	-.0335	.0057	.0329
60.000	.0021	.0718	.1090
90.000	-.0374	.0936	
120.000	-.0764	.1419	.4105
135.000	-.0400	.2277	.4029
150.000	-.0252	.2343	.3117
165.000	-.0146	.2391	.4318
180.000	.0060	.2088	.2567

MACH ( 4 ) = 1.249 BETA0 ( 3 ) = .030

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	1.3180	1.0450	.6215	.1498	-.1656	-.2243	-.2952	-.2650	-.1856	.2117	.0422	-.1425	-.2002	-.0754	.0157
30.000			.6268	.1509	-.1609	-.2243	-.2946	-.2650	.0551	.1548	-.0894	-.1645	-.1265	-.0682	.0086
60.000			.6307	.1540	-.1624	-.2191	-.2991	-.2376	.3035	-.0804	-.2779	-.1787	-.0374	-.0368	-.0563
90.000	1.0600		.6357	.1632	-.1581	-.2191	-.2940	-.2247	.6127		-.4525	-.4120	-.3016	-.0740	-.0785
120.000			.6383	.1669	-.1534	-.2159	-.2896	-.2315	.3653	.0180	-.0573	-.1286	-.0078	.0141	-.1000
135.000								-.2476		.2245		-.1473		.0162	
150.000			.6456	.1690	-.1329	-.2115	-.2956	-.2444	.1911	.3823	.0759	-.1635	-.1544	-.0632	-.1530
165.000				.1667	-.1508	-.2107	-.2901	-.2560	.1858	.3386	.3331	-.0501	-.0994	-.0489	-.1003
180.000	1.3180	1.0690	.6430	.1660	-.1497	-.2131	-.2896	-.2315	.1088	.3260	.3325	-.0629	-.1174	-.0368	-.0751
270.000		.9540							.6222						

X/LT .7460 .8530 .9280

## PHI

.000	-.0143	-.0165	-.0027
30.000	-.0335	.0057	.0329
60.000	.0021	.0718	.1090
90.000	-.0374	.0936	
120.000	-.0764	.1419	.4105
135.000	-.0400	.2277	.4029
150.000	-.0252	.2343	.3117
165.000	-.0146	.2391	.4318
180.000	.0060	.2088	.2567



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+112+S12N25+AT11 EXTERNAL TANK (RB1718)

MACH (4) = 1.249 BETAO (3) = .030

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI	.000	.0063	.0025	.0164
30.000	-.0025	.0064	.0214	.0843
60.000	-.0236	.0382	.0798	.2644
90.000	-.0499	.0895	.1584	.2049
120.000	-.0333	.1584	.0940	.0940
150.000	-.0361	.1518	.2675	.1694
180.000	-.0104	.1694	.1742	

MACH (4) = 1.246 BETAO (4) = 4.090

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380	
PHI	.000	1.3000	1.0250	.6117	.1459	-.1708	-.2317	-.3053	-.2751	-.1844	.1952	.0279	-.1466	-.1839	-.1151	-.0032
30.000				.5689	.0990	-.2011	-.2607	-.3243	-.2907	.0560	.1794	-.0570	-.1903	-.1708	-.0680	-.0027
60.000				.5404	.0740	-.2175	-.2719	-.3462	-.2992	.1580	-.0220	-.2394	-.1935	-.0531	-.0462	-.0206
90.000			.9609	.5338	.0738	-.2229	-.2763	-.3248	-.2215	.6195	-.4662	-.3591	-.2714	-.1113	-.0909	
120.000				.5492	.0874	-.2117	-.2714	-.3383	-.2946	.2157	.0910	-.0198	-.0945	-.0773	-.0387	-.1388
150.000				.5846	.1155	-.1951	-.2516	-.3309	-.2854	.1462	.2378	.0982	-.3381	-.1825	-.1537	-.2170
180.000				.6397	.1441	-.1796	-.2362	-.3113	-.2756	.1668	.3031	.2902	-.1389	-.1399	-.0458	-.1261
270.000			1.1480		.1563	-.1565	-.2213	-.2981	-.2119	.1249	.2800	.3797	-.0780	-.0752	-.0806	-.1171

X/LT .7460 .8330 .9280

PHI	.000	-.0081	-.0201	.0037
30.000		-.0018	-.0348	.0300
60.000		-.0086	.0305	.0882
90.000		.0027	.0502	
120.000		-.0026	.0839	.0797
150.000		-.0221	.0902	.0327
180.000		-.0317	.0662	-.0404
185.000		-.0124	.1108	.1852
189.000		-.0278	.1310	.0566

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ARC11-716 1A14 01+T12+S12N25+AT11: EXTERNAL TANK (R91718)

MACH (4) = 1.248 BETAO (5) = 5.150

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE C<sub>p</sub>

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI	.000	1.2330	.9749	.5820	.1206	-.1884	-.2475	-.3190	-.2931	.0941	-.0405	-.1313	-.1661	-.1671	-.0613
30.000				.4943	.0459	-.2454	-.2977	-.3565	-.3238	.1585	-.0721	-.2304	-.1900	-.0904	-.0126
60.000				.4516	.0022	-.2653	-.3131	-.3800	-.3228	.0192	-.1998	-.1863	-.0915	-.0458	-.0073
90.000			.8311	.4381	-.0023	-.2702	-.3209	-.3776	-.1844	.6204	-.4536	-.2285	-.2101	-.0814	-.0312
120.000				.4551	.0158	-.2613	-.3141	-.3750	-.0753	.1440	-.0179	-.0873	-.1440	-.0721	-.1625
135.000								-.1132		.1311		-.1826		-.1414	
150.000				.5067	.0327	-.2418	-.2909	-.3679	.1083	.2018	.0395	-.4072	-.2202	-.2807	-.2182
165.000					.0997	-.2027	-.2662	-.3404	.1235	.2458	.2232	-.2814	-.0885	-.1401	-.1812
180.000		1.2330	.9700	.6143	.1419	-.1731	-.2347	-.3115	.1072	.2203	.3025	-.0764	-.0649	-.2154	-.2071
270.000			1.2320						.6247						

X/LT .7460 .6530 .9280

PHI	.000	-.0196	-.0200	-.0049
30.000		.0098	-.0015	.0124
60.000		.0027	.0008	.1195
90.000		-.0107	.0609	
120.000		-.0337	.0567	.1497
135.000		-.0543	.0724	.0786
150.000		-.0617	.0504	-.0881
165.000		.0438	.0592	.2213
180.000		-.0821	.0631	.0132



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14 - VOL. 9

49C11-716 IAI14 21-712-51-2N23-AT10 EXTERNAL TANK (R81T24) ( 28 SEP 75 )

PARAMETRIC DATA

ALPHA0 = -10.000 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
YREF = 38.7090 INCHES YMRP = .0000 INCHES  
ZREF = 38.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

MACH ( 1 ) = .902 BETAD ( 1 ) = -9.890

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
CM1	.000	.8865	.4807	.0647	-.4272	-.6387	-.6803	-.1719	-.0760	-.0782	-.1799	-.2170	-.1350	-.1089	-.0849
30.000				.1801	-.3115	-.6057	-.6185	-.5302	-.2100	-.2760	-.4394	-.2488	-.1531	-.1260	-.0990
60.000				.3751	-.1186	-.4001	-.3702	-.2942	-.2330	-.3342	-.5563	-.7408	-.0533	.0447	-.0208
90.000				.9691	.6088	.1135	-.1793	.0450	.1991	.2176	-.7011	-.7580	-.1844	-.0255	-.0389
120.000				.7802	.2684	-.0481	-.0361	.0896	.2879	.3934	.1322	.1547	.0622	.0111	.0680
150.000				.7846	.2859	-.0408	-.0434	.0581	.2102	.2958	.4275	.3356	-.0312	-.2482	-.1534
165.000				.6391	.2289	-.1030	-.1139	-.0020	.1394	.2496	.4066	.3543	-.1097	-.2703	-.1858
180.000				.4592	.1430	-.1174	-.1836	-.0526	.0912	.2145	.3607	.2951	-.6640	-.3296	-.2677
270.000									.2332						-.1249
X/LT	.7460	.8530	.9280												

CM1	.000	-.0646	-.1015	-.3184
30.000		-.1049	-.0867	-.2618
60.000		-.0686	-.1809	-.1893
90.000		-.2371	-.3741	.3993
120.000		.1211	-.2651	.3993
150.000		.1292	.0037	.3279
180.000		.0468	.0998	.3584
165.000		.0426	.0986	.4631
180.000		-.0008	.0533	.2889

MACH ( 1 ) = .899 BETAD ( 2 ) = 10.090

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
CM1	.000	.8789	.4465	.0577	-.4273	-.6902	-.6102	-.1382	-.0768	-.0799	-.1704	-.2200	-.1341	-.1085	-.0566
30.000				.0236	-.4430	-.6914	-.1824	-.0503	.0333	.0305	-.1099	-.3578	-.2755	-.1040	-.0624
60.000				.0292	-.4413	-.4721	-.1437	-.0251	.0460	-.0100	-.2899	-.5675	-.4693	-.1090	-.0080
90.000				.4612	.0684	-.4128	-.1642	.0191	.1932	.2440	.5755	.8329	-.2257	-.0504	-.0270
120.000				.1605	-.2972	-.5801	-.4446	-.0753	.1319	.3480	.1179	.3281	-.2782	-.2123	-.1404
150.000				.3553	-.1251	-.6334	-.4374	-.1785	.0028	.1704	.1348	.4066	-.6501	-.4309	-.3041
165.000															-.1967

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ARC11-716 1A14 01+712+S12N25+AT10 EXTERNAL TANK

(RB1724)

WACH (1) = .899 BETAO (2) = 10.090

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5900 .6380

PMI

165.000 .0316 -.2921 -.2938 -.1501 .0119 .1643 .2173 .1352 -.3595 -.3784 -.3327 -.1873  
 180.000 .8789 .9208 .6340 .1384 -.1871 -.1904 -.0497 .0744 .1761 .3039 .2604 -.4835 -.3544 -.2184  
 270.000 .9530

X/LT .7400 .8330 .9280

PMI

.000 -.0681 -.1015 -.3253  
 30.000 -.0584 -.0946 -.3458  
 60.000 -.0364 -.0716 -.2223  
 90.000 -.0540 -.1188  
 120.000 -.0661 -.1595 .0963  
 135.000 -.0572 -.0659 -.0772  
 150.000 -.1244 -.1560 -.1898  
 165.000 -.0901 -.0779 .0246  
 180.000 -.1289 -.0908 .0484



ARC11-71.6 1A14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1725) ( 28 SEP 75 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 LREF = 35.7090 INCHES YMRP = .0000 INCHES  
 BREF = 35.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

MACH ( 1 ) = .899 BETAD ( 1 ) = -9.930

## PARAMETRIC DATA

ALPHA = -6.000 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI	.0003	.9231	.5154	.1201	-.3767	-.5653	-.6899	-.1661	-.0778	-.0905	-.1871	-.2964	-.1921	-.1220	-.1055
30.000				.2452	-.2575	-.5602	-.5765	-.4620	-.1839	-.2454	-.4510	-.4588	-.2268	-.1426	-.1258
60.000				.4312	-.0681	-.3626	-.3354	-.2388	-.1394	-.2311	-.5719	-.6875	-.3229	-.0326	.0507
90.000			1.0050	.6301	.1307	-.1674	-.1247	.0603	.2294	.2777		-.6697	-.6320	-.0998	-.0069
120.000				.7423	.2434	-.0706	-.0570	.0861	.5640	.3509	.0560	.1332	.0331	-.0158	.0048
150.000									.2126		.2437	.0249		-.0234	
180.000				.7398	.2377	-.0913	-.0987	.0129	.1780	.2540	.3974	.3149	-.0447	-.2463	-.1558
210.000					.1653	-.1631	-.1776	-.0451	.1063	.2153	.3786	.3391	-.1101	-.2795	-.1987
		.9231	1.0100	.5816	.0824	-.2317	-.2382	-.0798	.0673	.1908	.3399	.2804	-.6899	-.3345	-.2604
			.5904						.3188						

X/LT .7480 .6530 .9280

## PHI

.0000 - .0715 - .1046 - .3234  
 30.000 - .0961 - .0880 - .2691  
 60.000 - .0459 - .0890 - .1658  
 90.000 - .1190 - .3454  
 120.000 .1255 - .1630 .6378  
 150.000 .1333 .0474 .3412  
 180.000 .0341 .1268 .3919  
 210.000 .0573 .1257 .4746  
 240.000 .0132 .0757 .2887

MACH ( 1 ) = .898 BETAD ( 2 ) = 10.090

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI	.0005	.9192	.5055	.1072	-.3930	-.6651	-.6896	-.1740	-.0854	-.0926	-.1802	-.2924	-.1839	-.1254	-.1004
30.000				.0585	-.4157	-.6756	-.2468	-.0604	.0392	.0335	-.1272	-.3287	-.2132	-.0833	-.0639
60.000				.0561	-.4191	-.5795	-.1350	-.0038	.0766	.0328	-.2742	-.5830	-.3548	-.0689	-.0247
90.000			.9021	.0885	.3938	-.6215	-.1391	.0378	.2146	.3232		-.5894	-.4711	-.1492	-.0419
120.000				.1926	-.2006	-.6007	-.2934	-.0447	.1520	.3503	.0492	-.1576	-.3407	-.2444	-.2060
150.000									.0825	.1202	.1202	-.4200	-.2546		
180.000					.0221	-.4774	-.4051	.1508	.0002	.1756	.1223	-.3847	-.6573	-.4111	-.2575
210.000															-.1836

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ARC11-7:6 IA14 01+T12+S12N23+AT10 EXTERNAL TANK (R81725)

WACH ( 1 ) = .898 BETA0 ( 2 ) = 10.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PMI															
165.000															
190.000	.9192	.8733	.5803	.0795	-.2570	-.2515	-.0842	.0495	.1485	.2734	.2426	-.3751	-.3759	-.3336	-.1813
270.000		.9955													-.2122

X/LT .7480 .8530 .9280

PMI

.000	-.0743	-.1023	-.3282
90.000	-.0548	-.0837	-.3356
80.000	-.0368	-.0646	-.2119
90.000	-.0432	-.1033	
120.000	-.0903	-.1352	.1107
135.000	-.0901	-.0636	-.0567
150.000	-.1087	-.1318	-.1757
165.000	-.0793	-.0562	.0491
180.000	-.1164	-.0679	.0666



REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 LREF = 36.7390 INCHES YMRP = .0000 INCHES  
 BRFP = 36.7390 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHA0 = -6.000 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

MACH ( 1 ) = .897 BETAO ( 1 ) = -9.940

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.000	.9565	.9718	.1682	-.3310	-.6351	-.6646	-.1559	-.0852	-.0931	-.1977	-.2795	-.1748	-.1236	-.1029
.000				.3014	-.1977	-.5174	-.5325	-.3655	-.1608	-.2040	-.4843	-.4174	-.2046	-.1356	-.1133
30.000				.4832	-.0251	-.3352	-.3014	-.1796	-.0684	-.1431	-.5976	-.6724	-.2642	-.0285	.0278
60.000				.6490	-.1408	-.1167	-.1206	.0765	.2477	.3319	-.6543	-.5682	-.1145	-.0067	.0088
90.000		1.0350		.7216	.2161	-.1053	-.3881	.0714	.2385	.3107	-.0581	.1059	.0484	-.0173	.0017
120.000								.1602	.1802		.1882		.0120	-.0320	
135.000				.6924	.1813	-.1551	-.1479	-.0410	.3397	.2074	.3549	.2860	-.0729	-.2527	-.1641
150.000					.0996	-.2336	-.2342	-.0833	.0741	.1811	.3536	.3225	-.1198	-.2773	-.1995
165.000				.9565	.9715	.5274	-.0255	-.3015	-.2929	-.1037	.0414	.1676	.3232	.2735	-.6915
180.000				.5261					.0414	.1676	.3232	.2735	-.6915	-.3346	-.2804
270.000									.3856						-.1086

X/LT .7480 .8530 .9280

PMI

.000	-.0748	-.1102	-.3286
30.000	-.0874	-.0894	-.2820
60.000	-.0075	-.0244	-.1404
90.000	-.0390	-.2130	
120.000	.1346	-.0694	.6480
135.000	.1422	.0855	.3570
150.000	.0750	.1531	.4148
165.000	.0789	.1579	.4961
180.000	.0325	.1027	.3001

MACH ( 1 ) = .898 BETAO ( 2 ) = 10.070

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.000	.9534	.9616	.1629	-.3371	-.6382	-.6712	-.1784	-.0843	-.0944	-.1937	-.2826	-.1729	-.1167	-.0998
.000				.3014	-.1960	-.5360	-.5781	-.0660	.0368	.0391	-.1396	-.3171	-.2041	-.0771	-.0618
30.000				.4851	-.0326	-.6361	-.6144	.0144	.1127	.0738	-.2707	-.5620	-.3395	-.0472	-.0336
60.000				.6499	-.1328	-.6081	-.1242	.0596	.2337	.3937	-.6600	-.4688	-.1234	-.0279	-.0383
90.000		.5349		.7856	-.1110	-.5993	-.0336	-.0183	.1671	.2137	-.2124	-.1954	-.3338	-.2447	-.1249
120.000								.0846	.1671	.2137	.0124	-.1954	-.3338	-.2447	-.1249
135.000				.6910	.1850	-.1591	-.1494	-.0279	.3395	.2074	.3549	.2860	-.0729	-.2527	-.1641
150.000					.0996	-.2336	-.2342	-.0833	.0741	.1811	.3536	.3225	-.1198	-.2773	-.1995
165.000				.9565	.9715	.5274	-.0255	-.3015	-.2929	-.1037	.0414	.1676	.3232	.2735	-.6915
180.000				.5261					.0414	.1676	.3232	.2735	-.6915	-.3346	-.2804
270.000									.3856						-.1086

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4478

ARC11-716 1A14 04+112+S12N25+AT10 EXTERNAL TANK

(R81726)

WAGON ( 1 ) = .896 BETA0 ( 2 ) = 10.075

SECTION: ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1120	.1780	.1940	.2130	.2420	.2930	.3440	.3940	.4510	.5050	.5900	.6300
PM1															
165.000															
180.000	.9334	.8420	.5273	.3134	-.3166	-.3171	-.1035	.0315	.1280	.2561	.0942	-.3742	-.3702	-.3281	-.1787
270.000	1.0290														
W/LT	.7400	.9530	.9200												
PM1															
.000	-.0763	-.1040	-.3357												
30.000	-.0463	-.0716	-.3253												
60.000	-.0309	-.0485	-.1969												
90.000	-.0411	-.0699													
120.000	-.0455	-.1018	.1304												
135.000	-.0347	-.0332	-.0323												
150.000	-.0600	-.1043	-.1600												
165.000	-.0639	-.0313	.0722												
180.000	-.1021	-.0412	.0872												



DATE 06 JAN 75

TABULATED PRESSURE DATA - IALIA - VOL. 9

PAGE 4679

ARC11-715 IALIA 26+112+512425+ATIO EXTERNAL TANK

(RB1787) (28 3- 75)

## REFERENCE DATA

SECF = 2.4210 32. FT. 14R2 = 29.5800 INCHES  
 .REF = 38.7090 INCHES 14R3 = .0000 INCHES  
 BREF = 38.7090 INCHES 24R = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA0 = -4.000 ELEVON = .000  
 RUDDER = .000 SPDRK = .000

MACH (1) = .899 BETA0 (1) = -9.990

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CR

M/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9805	.8262	.2252	-.2785	-.6002	-.6374	-.1712	-.0831	-.0938	-.1963	-.1652	-.1147	-.0982	-.0933
30.000		.3686	-.1300	-.4794	-.4909	-.3235	-.1252	-.1801	-.4577	-.3711	-.4577	-.1684	-.1282	-.1019	-.0770
60.000		.5590	.0177	-.2982	-.2758	-.1279	.0011	-.0615	-.7114	-.2983	-.2201	-.0114	.0217	.0141	
90.000		1.0570	.6624	.1384	-.1613	-.1118	.0968	.2683	.3748	-.5957	-.5341	-.0990	-.0226	.0119	
120.000		.6928	.1864	-.1433	-.1113	.0468	.2093	.2652	-.2348	.0732	.0566	-.0087	-.0090	.0332	
150.000		.6406	.1299	-.2010	-.2014	-.0703	.1045	.1647	.3244	.2667	.0793	-.2448	-.1612	-.0382	
180.000		.9805	.9286	.4729	-.0339	-.2924	-.1186	.1501	.3278	.3083	-.1140	-.2733	-.1955	-.0409	
210.000		.5516				-.3267	-.1030	.0234	.1527	.3097	.2638	-.6833	-.3235	-.2459	-.0909
270.000								.4421							

M/LT .7480 .8530 .9280

PHI

.0000	-.0746	-.1033	-.3337
30.000	-.0773	-.0785	-.2902
60.000	.0156	.0237	-.1316
90.000	-.0024	-.1287	
120.000	.1472	-.0261	.6804
150.000	.1561	.1267	.3722
180.000	.0979	.1810	.4265
210.000	.0979	.1782	.5109
240.000	.0552	.1282	.3134



ARC11-716 IA14 OR-T12-S12M5-AT10 EXTERNAL TANK

(RB1728) ( 24 SEP 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 29.5000 INCHES  
 LREF = 30.7390 INCHES YMRP = .0000 INCHES  
 BREF = 30.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

MACH ( 1 ) = 1.245 BETAO ( 1 ) = -10.080

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1990	.9387	.5573	.1008	-.2054	-.2650	-.3317	-.3126	-.1340	.0370	-.0877	-.1594	-.1734	-.1871	-.0549
30.000			.6973	.2206	-.1066	-.1764	-.2519	-.2228	.0711	-.1157	-.3916	-.0919	-.1173	-.1190	-.0977
60.000			.6212	.3373	-.0165	-.0887	-.1831	-.1173	.3005	-.1618	-.3367	-.1929	-.1820	-.0056	.0421
90.000		1.2700	.6833	.3968	.0262	-.0480	-.1386	.0801	.6239	-.4495	-.3993	-.3993	-.2263	-.0895	.0070
120.000			.6479	.3650	.0623	-.0718	-.1602	-.0918	.3485	-.0999	-.1442	.1781	.2926	.1646	.0373
150.000								-.1366	-.0659			.1144		.1533	
180.000			.7627	.2857	-.0617	-.1291	-.2222	-.1726	.1548	-.0167	.2857	.0314	.1082	.0021	-.0059
210.000				.2045	-.1261	-.1920	-.2747	-.2403	.0226	.3978	.4663	.1909	-.0363	-.0758	-.0339
270.000			1.1990	1.0510	.6091	.1904	-.1695	-.2289	.3010	-.2717	.0549	.4363	.4761	.0345	-.2261
															-.1316
X/LT	.7480	.5330	.9280												

MACH ( 1 ) = 1.245 BETAO ( 2 ) = -7.960

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2310	.9743	.5906	.1213	-.1903	-.2513	-.3180	-.2944	-.1656	.1154	-.0486	-.1635	-.1882	-.1568	-.0647
30.000			.6868	.2073	-.1188	-.1842	-.2635	-.2315	.0792	-.0784	-.2934	-.0955	-.0914	-.1012	-.1022
60.000			.7819	.2873	-.0509	-.1188	-.2102	-.1421	.3066	-.1511	-.3352	-.1734	-.1863	-.0301	.0221
90.000		1.2290	.8304	.3438	-.0177	-.0889	-.1743	-.1007	.6163	-.4647	-.4033	-.2556	-.0665	-.0183	
120.000			.8060	.3235	-.0342	-.1054	-.1903	-.1228	.3492	-.0911	-.1202	.1153	.2245	.1295	-.0190
150.000								-.1633		-.0353		.0013	.1244		
180.000			.7427	.2655	-.0806	-.1477	-.2367	-.1913	.1624	.2156	.2821	.0201	.0584	-.0834	-.0425



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VL. 9

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ARC11-716 1A14 04+T112+512+25+AT110 EXTERNAL TANK (R01720)

MACH ( 1 ) = 1.245 BETAO ( 2 ) = -7.900

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
165.000				.2906	-.1284	-.1951	-.2738	-.2395	.0362	.4205	.4580	.1520	-.0787	-.1084	-.0845
180.000	1.2310	1.0680	.6229	.1565	-.1599	-.2217	-.2936	-.2654	.0784	.4305	.4989	-.2237	-.1152	-.1873	-.1058
270.000		.8497						.6592							

K/LT .7480 .8330 .9280

## PMI

.000	-.0293	-.0030	.0001
30.000	-.0402	.0274	.0400
60.000	-.0316	.1198	.1495
90.000	-.0278	.1016	
120.000	-.0283	.1384	.7809
150.000	-.0134	.2962	.5232
180.000	.0320	.3199	.5682
165.000	-.0441	.3153	.6280
180.000	.0526	.2746	.4582

MACH ( 1 ) = 1.248 BETAO ( 3 ) = -6.020

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2610	1.0080	.5991	.1323	-.1830	-.2439	-.3120	-.2841	-.2016	.1568	-.0157	-.1584	-.1896	-.1334	-.0262
30.000			.6783	.1967	-.1259	-.1980	-.2713	-.2414	.0819	-.0164	-.2368	-.1293	-.0812	-.0931	-.0769
60.000			.7486	.2581	-.0784	-.1474	-.2367	-.1688	.3091	-.1361	-.3581	-.1532	-.1095	-.0799	.0070
90.000		1.1820	.7831	.2948	-.0541	-.1259	-.2082	-.1374	.5105	-.4674	-.4159	-.2798	-.0547	-.0412	
120.000			.7638	.2789	-.0680	-.1358	-.2164	-.1535	.3520	-.0728	-.1077	.0023	.1716	.0946	-.0561
150.000			.7210	.2409	-.0979	-.1639	-.2509	-.2065	.1663	.3323	.2575	.0052	-.0032	-.0418	-.0885
165.000			.1959	-.1329	-.1986	-.2767	-.2426	.1031	.4225	.4698	.1090	-.1702	-.1250	-.0868	
180.000	1.2610	1.0680	.6125	.1631	-.1562	-.2196	-.2901	-.2595	.0931	.3747	.5191	-.2519	-.2307	-.1682	-.0967
270.000		.9021						.6458							

K/LT .7480 .8330 .9280

## PMI

.000	-.0374	-.0069	.0131
30.000	-.0385	.0075	.0440
60.000	.0061	.0919	.1264
90.000	-.0243	.1018	
120.000	-.0500	.1956	.6511
150.000	-.0118	.2118	.5117

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TABULATED PRESSURE DATA - IA14A - VOL. 9

DATE 06 JAN 75

ARC11-716 IA14 01+712+S12N25+AT10 EXTERNAL TANK (R81728)

MACH ( 1 ) = 1.248 BETAO ( 3 ) = -6.020

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

165.000 .0176 .2910 .6088  
169.000 .0441 .2555 .4481

MACH ( 1 ) = 1.247 BETAO ( 4 ) = -3.950

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.2760 1.0240 .6115 .1395 -.1744 -.2342 -.3062 -.2755 -.1896 .192~ .0159 -.1514 -.1646 -.1009 -.0028  
30.000 .6599 .1843 -.1398 -.2057 -.2767 -.2467 .0025 .0712 -.1876 -.1584 -.0856 -.0820 -.0489  
60.000 .7075 .2222 -.1085 -.1714 -.2572 -.1927 .3117 -.1234 -.3403 -.1558 -.0548 -.1061 -.0208  
90.000 1.1470 .7323 .2467 -.0911 -.1572 -.2372 -.1685 .0061 -.4587 -.1245 -.3004 -.0773 -.0603  
120.000 .7244 .2419 -.0824 -.1608 -.2408 -.1788 .3614 -.0389 -.0770 -.0358 .1051 .0741 -.0773  
135.000 .7021 .2191 -.1131 -.1777 -.2629 -.2151 .1109 -.0667 -.0667 -.0667 .0859  
150.000 .1920 .1373 -.1997 -.2767 -.2423 .1581 .4015 .4512 .4512 .4512 .4512 .4512 .4512 .4512  
165.000 1.2760 1.0750 .6432 .1681 -.1504 -.2148 -.2847 -.2418 .1020 .3218 .5137 -.2431 -.2568 -.0458 -.1307  
180.000 .9560  
270.000 .6436

X/LT .7460 .8530 .9280

PHI

.000 -.0102 -.0082 -.0007  
30.000 -.0316 .0106 .0332  
60.000 .0028 .0830 .1025  
90.000 -.0334 .1126 .6222  
120.000 -.0737 .1123 .6222  
135.000 -.0301 .2472 .4691  
150.000 -.0072 .2716 .4717  
165.000 .0095 .2721 .5315  
180.000 .0250 .2407 .4080



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-715 1A14 01-112+S12N25+AT10 EXTERNAL TANK

(RB1720)

MACH ( 1 ) = 1.246 BETAO ( 5 ) = -2.040

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	1.2910	1.0360	.6179	.1420	-.1698	-.2306	-.3020	-.2696	-.1887	.2062	.0344	-.1454	-.2002	-.0867	.0073
.000															
30.000			.6440	.1672	-.1529	-.2164	-.2968	-.2554	.0558	.1117	-.1537	-.1695	-.0982	-.0740	-.0131
60.000			.6699	.1920	-.1349	-.1974	-.2796	-.2170	.3142	-.1078	-.3177	-.1571	-.0328	-.0681	-.0604
90.000		1.1100	.9863	.2079	-.1248	-.1888	-.2662	-.2000	.3093	-.4568	-.4317	-.2983	-.1002	-.0679	-.0679
120.000			.6843	.2057	-.1249	-.1886	-.2660	-.2057	.3740	-.0115	-.0700	-.1052	.0499	.0512	-.0948
135.000								-.2291		.1870		-.1054		.0569	
150.000			.6778	.2043	-.1308	-.1944	-.2822	-.2284	.2086	.3968	.1318	-.0930	-.1021	-.0606	-.1240
165.000				.1895	-.1420	-.2030	-.2830	-.2477	.1680	.3577	.4432	-.0761	-.1535	-.0671	-.0971
180.000	1.2910	1.0790	.6471	.1097	-.1455	-.2126	-.2856	-.2284	.1182	.3000	.4936	-.1688	-.1773	-.0539	-.1018
270.000		1.0050							.6299						

X/LT .7450 .9530 .9280

PHI

.000	.0003	.0027	.0176												
30.000	-.0213	.0135	.0173												
60.000	-.0043	.0706	.0935												
90.000	-.0420	.1095													
120.000	-.0875	.0943	.5449												
135.000	-.0438	.2166	.3945												
150.000	-.0402	.2405	.3796												
165.000	-.0025	.2426	.5145												
180.000	.0057	.2071	.4226												

MACH ( 1 ) = 1.246 BETAO ( 6 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	1.3000	1.0420	.6183	.1430	-.1677	-.2306	-.2994	-.2697	-.1841	.2067	.0366	-.1452	-.2047	-.0779	.0142
.000															
30.000			.6213	.1443	-.1661	-.2298	-.2979	-.2686	.0531	.1528	-.1198	-.1725	-.1213	-.0727	.0029
60.000			.6265	.1434	-.1661	-.2242	-.3045	-.2431	.3052	-.0893	-.2306	-.1816	-.0275	-.0366	-.0593
90.000		1.0620	.6341	.1594	-.1616	-.2215	-.2931	-.2323	.6133	-.4502	-.4216	-.2649	-.1045	-.1045	-.0805
120.000			.6405	.1684	-.1568	-.2156	-.2895	-.2033	.3794	.0244	-.0168	-.1252	-.0047	.0280	-.1140
135.000								-.2518		.2329		-.1574		.0154	
150.000			.6492	.1707	-.1512	-.2108	-.2947	-.2455	.1974	.3858	.0805	-.1580	-.1283	-.0859	-.1714
165.000				.1723	-.1497	-.2106	-.2898	-.2559	.1962	.3526	.3060	-.0418	-.1659	-.0689	-.1231
180.000	1.3000	1.0760	.6487	.1723	-.1489	-.2108	-.2893	-.2297	.1202	.3362	.4532	-.1450	-.0918	-.0523	-.1199
270.000		1.0580							.6225						

X/LT .7450 .9530 .9280

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(R81788)

ARC11-716 IAI4 OL+T12+912N29+AT10 EXTERNAL TANK

MACH (1) = 1.246 SEVAC (S) = .010

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8330 .9280

PMI

.000	.0090	.0047	.0174
30.000	-.0036	.0101	.0236
60.000	-.0236	.0448	.0828
90.000	-.0078	.0857	
120.000	-.0065	.0878	.3918
135.000	.0024	.1779	.2552
150.000	-.0120	.1727	.2275
165.000	.0137	.1875	.2932
180.000	.0240	.1888	.2580



ARC11-716 1A14 01+112+S12N25+AT10 EXTERNAL TANK (RB1T29) ( 20 SEP 75 )

PARAMETRIC DATA

ALPHA = -10.000 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
LREF = 39.7090 INCHES YMRP = .0000 INCHES  
BREF = 39.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

MACH ( 1 ) = 1.245 BETAD ( 1 ) = .030

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI	.000	1.1870	.7886	.3861	-.0417	-.2996	-.3482	-.4019	-.3624	.0867	-.0174	-.2264	-.1991	-.0446	-.0056
30.000				.4015	-.0293	-.2936	-.3475	-.3928	-.3547	-.0429	-.2131	-.2023	-.1543	-.0869	-.0352
60.000				.4584	.0187	-.2680	-.3199	-.3606	-.3055	-.4358	-.5428	-.2982	-.2235	-.0548	-.0311
90.000			.9571	.5692	.1157	-.1979	-.2571	-.2891	-.0944	.4905	-.2604	-.3140	-.2178	-.1067	-.0922
120.000				.7119	.2468	-.0977	-.1642	-.2445	-.1657	.5932	.2965	.1314	.0488	-.0146	-.1784
135.000								-.1662		.4832	.0995			-.0637	
150.000				.8273	.3443	-.0149	-.0853	-.1827	-.1433	.6084	.2636	-.0708	-.0244	-.1890	-.2280
165.000				.3973	.0276	-.0516	-.1423	-.1045	.3605	.6426	.5469	-.0325	.0046	-.1108	-.1382
180.000			1.1870	.8935	.4050	.0307	-.0402	-.1315	-.0656	.2567	.6066	-.1004	.0554	-.0909	-.1375
270.000			.9507							.4865					

X/LT .7460 .8530 .9280

PHI	.000	-.0319	-.0079	-.0319
30.000		-.0619	-.0185	.0266
60.000		-.0464	-.0012	.1245
90.000		-.0464	.0024	
120.000		-.0464	-.0309	.2878
135.000		-.0565	.0537	.1505
150.000		-.0752	.0465	.1946
165.000		-.0542	.0800	.3146
180.000		-.0467	.0941	.2665

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ARC11-716 1A14 01+112+S12N25+AT11 EXTERNAL TANK

(RB1T30) ( 02 OCT 75 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 LREF = 38.7090 INCHES YMRP = .0000 INCHES  
 SREF = 38.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

MACH ( 1 ) = .972 BETA0 ( 1 ) = .040

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1580	.8845	.4505	-.0754	-.4297	-.5032	-.5173	-.0121	-.0253	-.2786	-.3837	.0046	.0118	.0116
30.000				.4543	-.0744	-.4325	-.5073	-.2969	-.0003	-.0859	-.3125	-.3587	-.0103	-.0031	.0019
60.000				.4552	-.0737	-.4297	-.4978	-.1418	.1678	-.3826	-.5116	-.2395	-.0529	-.0237	.0000
90.000			.9011	.4602	-.0618	-.4241	-.4874	-.1031	.3701	-.5064	-.6965	-.6015	-.1424	-.0671	.0005
120.000				.4646	-.0545	-.4200	-.4925	-.0591	.2292	-.3015	-.2582	-.1242	-.1134	-.1835	-.0405
135.000								.1490		.0649		-.1941		-.2208	
150.000				.4766	-.0468	-.4146	-.4827	-.1097	.0995	.2358	-.1310	-.3530	-.2111	-.3182	-.1027
165.000				-.0452	-.4079	-.4864	-.1087	.0772	.2127	.2899	.0919	-.4231	-.1664	-.2489	-.0546
180.000	1.1580	.9199	.4766	-.0477	-.4149	-.4832	-.0732	.0304	.1935	.2915	.1895	-.4820	-.508	-.2329	-.0600
270.000		.9032						.5112							

X/LT .7460 .8330 .9280

## PHI

.000	.0437	.0493	-.1628
30.000	.0413	.0565	-.1498
60.000	.0378	.0906	-.0631
90.000	.0989	.1140	
120.000	.1238	.0720	.1689
135.000	.1238	.1183	.1159
150.000	.0922	.1009	.0407
165.000	.1201	.1250	.0769
180.000	.1192	.1262	-.0647

MACH ( 2 ) = 1.002 BETA0 ( 1 ) = .040

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1720	.9059	.4774	-.0431	-.3931	-.4645	-.5478	-.0251	.0248	-.2277	-.3490	-.0527	-.0094	-.0199
30.000				.4804	-.0441	-.3963	-.4686	-.5421	-.0275	-.0355	-.2728	-.3417	-.0560	-.0274	-.0346
60.000				.4799	-.0431	-.3929	-.4583	-.4500	.0660	-.2765	-.3317	-.4798	-.2016	-.0814	-.0672
90.000		.9213		.4868	-.0279	-.3874	-.4595	-.2866	.3340	.5342	-.6747	-.6029	-.1964	-.1809	-.0564
120.000				.4911	-.0231	-.3816	-.4572	-.1613	.1472	.3337	-.1710	-.2097	-.0883	-.0982	-.1807
135.000								.0694		.0946		-.1593		-.2167	
150.000				.5034	-.0153	-.3807	-.4466	-.2193	.0351	.2698	.2744	-.0910	-.3135	-.1870	-.3258
170.000															-.1904



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01\*113+512N25\*AT11 EXTERNAL TANK (R811730)

MACH ( 2 ) = 1.002 BETAO ( 1 ) = .040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/UT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000															
180.000	1.1720	.9386	.5034	-.0153	-.3746	-.4492	-.2541	.0488	.2249	.3097	.1257	-.3672	-.1429	-.2511	-.1371
270.000		.9220					-.1226	-.0082	.2085	.3088	.2184	-.4267	-.1239	-.2365	-.1287

X/UT .7460 .8330 .9280

PHI															
.000	.0598	.0792	-.1231												
30.000	.0565	.0866	-.1077												
60.000	.0685	.1185	-.0302												
90.000	.1085	.1434													
120.000	.1220	.1067	.1713												
135.000	.1157	.1420	.1313												
150.000	.0984	.1243	.0541												
165.000	.1088	.1403	.0390												
180.000	.1115	.1442	-.0346												

MACH ( 3 ) = 1.025 BETAO ( 1 ) = .040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/UT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	.9237	.4930	-.0168	-.3662	-.4298	-.5133	-.0521	.1177	.0571	-.1805	-.3077	-.0509	-.0021	-.0412
30.000			.5022	-.0168	-.3676	-.4352	-.5117	-.0372	.1243	.0023	-.2362	-.3133	-.0465	-.0148	-.0527
60.000			.5024	-.0168	-.3628	-.4264	-.5272	.0371	.2916	-.3014	-.4401	-.1745	-.0573	-.0534	-.0762
90.000		.9397	.5107	-.0021	-.3605	-.4255	-.4404	.2559	.5455		-.6286	-.5257	-.1682	-.1117	-.0905
120.000			.5152	.0041	-.3563	-.4226	-.5001	.0941	.3511	-.1397	-.1713	-.0581	-.0668	-.1556	-.1680
135.000								.0324	.1239			-.1324		-.1902	
150.000			.5278	.0102	-.3528	-.4142	-.5237	.0173	.2682	.3016	-.0594	-.2786	-.1571	-.2984	-.2386
165.000				.0098	-.3442	-.4171	-.5054	.0358	.2113	.3351	.1701	-.3276	-.1197	-.2305	-.1766
180.000	1.1860	.9372	.5266	.0084	-.3497	-.4159	-.3001	-.0273	.2003	.3269	.2520	-.3820	-.0957	-.2167	-.1635
270.000		.9435													

X/UT .7460 .8330 .9280

PHI															
.000	.0121	.0980	-.0914												
30.000	.0029	.1037	-.0767												
60.000	.0105	.1316	-.0023												
90.000	.0587	.1506													
120.000	.0881	.1131	.1850												
135.000	.0753	.1460	.1378												
180.000	.0592	.1254	.0702												

ORIGINAL PAGE 1  
OF FOUR PAGES



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4488

(RB1730)

ARC1:-716 IA14 01+12+512+25+AT11 EXTERNAL TANK

MACM ( 3 ) = 1.025 BETAD ( 1 ) = .040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

RHI

165.000 .0822 .145' .1140

180.000 .0781 .1464 -.0092



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA144 - VOL. 9

PAGE 4489

ARC11-716 IA14 01\*12\*512\*2\*4\*110 EXTERNAL TANK (081731) (06 FEB 74)

## REFERENCE DATA

REF = 2.4210 SQ.FT. XWR = 29.3800 INCHES  
 REF = 38.7090 INCHES XWR = .0000 INCHES  
 REF = 33.7090 INCHES ZWR = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHA( 1 ) = -10.130 BETA( 1 ) = -0.370

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1720	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
CHI															
.000	.9144	.4973	.0831	-.3954	-.6857	-.6403	-.1673	-.0599	-.0662	-.1839	-.3115	-.2060	-.1125	-.0880	-.0521
30.000			.1825	-.3131	-.6201	-.6144	-.3846	-.1862	-.2072	-.3391	-.4770	-.2673	-.1278	-.1093	-.0753
60.000			.3512	-.1583	-.4429	-.3301	-.2928	-.1959	-.3059	-.5254	-.7153	-.4384	-.0893	.0384	-.0037
90.000		.9338	.5635	.0662	-.2395	-.1985	.0440	.1917	.2176	-.6823	-.7636	-.2115	-.0292	-.0365	
120.000			.7226	.2204	-.1015	-.0801	.0594	.2675	.3937	.1130	.0228	-.0738	-.0179	.0562	
150.000			.7580	.2638	-.0765	-.0774	.0410	.2282	.2717	.0033			-.0456		
180.000			.9144	.10370	.2113	-.1195	-.1265	.0077	.2885	.4102	.2456	-.0057	-.2667	-.1627	-.0460
210.000			.5127	.1477	-.1798	-.1860	-.0449	.1094	.2277	.3720	.3555	-.1540	-.3082	-.1791	-.0475
K/LT	.7460	.6530	.9280												

## PARAMETRIC DATA

VACH = .900 ELEVON = .000  
 P.O.DER = .000 SPOBRK = .000

ALPHA( 1 ) = -10.130 BETA( 2 ) = -6.580

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
CHI															
.000	.9344	.5102	.0910	-.4014	-.6643	-.5516	-.1240	-.0408	-.0539	-.1583	-.2191	-.1955	-.0913	-.0610	-.0399
30.000			.1545	-.3314	-.6329	-.6105	-.2137	-.1459	-.1803	-.3336	-.5001	-.2855	-.1051	-.0829	-.0523
60.000			.3105	-.1182	-.4770	-.4070	-.2587	-.1566	-.2620	-.4866	-.6974	-.4772	-.1169	.0232	.0060
90.000		.6674	.5025	.1006	-.2903	-.2237	.0394	.1843	.2125	-.6571	-.7934	-.2369	-.0303	-.0060	
120.000			.7663	.1547	-.1145	-.1020	.0513	.2897	.3757	.1050	.0199	-.0198	-.1147	-.0392	.0442
150.000			.7577	.2127				.2127	.2555			-.0342		-.0543	
180.000			.9216	.2166	-.1062	-.0524	.0276	.1851	.3511	.5093	.4482	-.1045	-.2797	-.1595	-.0456
K/LT															

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(R81731)

ARC11-716 IA14 CR+T12+S12+25+AT10 EXTERNAL TANK

ALPHA(1) = -10.130 BETA(2) = -6.560

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	0.000	0.000	0.490	1.130	1.780	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.380
PMI															
165.000				.2032	-.1283	-.1318	-.0003	.1499	.2631	.4048	.3208	-.1956	-.2847	-.1701	-.0223
180.000	.9344	1.0620	.6579	.1537	-.1736	-.1783	-.0201	.1215	.2424	.3788	.3070	-.2311	-.3364	-.2073	-.0341
270.000		.5493						.2268							

X/LT 7480 .6330 .9280

PMI

.000	-.0365	-.0783	-.3236
30.000	-.0349	-.0735	-.2590
60.000	-.0431	-.0733	-.1349
90.000	-.0788	-.2485	
120.000	.0942	-.2878	.5491
135.000	.0987	-.0198	.2976
150.000	.0394	.0639	.2532
165.000	.0480	.0789	.4446
180.000	.0220	.0499	.2827

ALPHA(1) = -10.130 BETA(3) = -4.840

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	0.000	0.000	0.490	1.130	1.780	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.380
PMI															
.000				-.3630	-.6653	-.5082	-.1036	-.0256	-.0390	-.1526	-.2990	-.2171	-.0791	-.0353	-.0284
30.000	.9372	.5350	.1132	-.3308	-.6288	-.6249	-.1790	-.1088	-.1392	-.3130	-.4900	-.2949	-.0923	-.0584	-.0369
60.000			.2868	-.2141	-.5129	-.4083	-.2383	-.1246	-.2512	-.4591	-.6776	-.4879	-.1337	-.0079	.0225
90.000		.8905	.4618	-.0405	-.3377	-.2623	.0195	.1848	.2140	-.6384	-.8052	-.2631	-.0620	.0037	
120.000			.6221	.1216	-.1967	-.1612	-.0428	.2401	.3763	.1069	.0636	-.0553	-.1581	-.0602	.0387
135.000								.2940		.2514		-.0646		-.0848	
150.000			.7024	.1986	-.1338	-.1246	.0197	.1844	.2918	.3812	.0711	-.0928	-.3108	-.1646	-.0470
165.000				.1943	-.1343	-.1339	.0024	.1566	.2718	.4121	.3025	-.2304	-.2887	-.1761	-.0210
180.000	.9372	1.0740	.6718	.1802	-.1664	-.1672	-.0229	.1349	.2582	.3920	.3130	-.2475	-.2884	-.2087	-.0418
270.000		.6008						.2228							

X/LT 7480 .6330 .9280

PMI

.000	-.0255	-.0684	-.3260
30.000	-.0415	-.0639	-.2658
60.000	-.0265	-.0343	-.1347
90.000	-.0393	-.1729	
120.000	.0879	-.2889	.5105
135.000	.0889	-.0251	.2722
150.000	.0282	.0436	.2262



DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81731)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA0( 1) = -10.133 BETA0( 3) = -4.840

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PHI	
165.000	.0321 .0689 .3315
180.000	.0318 .0462 .2561

ALPHA0( 1) = -10.080 BETA0( 4) = -3.250

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0280	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	.9743	.5900	.1240	-.3677	-.6678	-.4624	-.0955	-.0163	-.0245	-.1504	-.2853	-.2271	-.0727	-.0239	-.0128
30.000			.1805	-.3394	-.6343	-.6325	-.1594	-.0813	-.1062	-.2798	-.4209	-.2814	-.0999	-.0478	-.0260
60.000			.2624	-.2398	-.5421	-.4025	-.1886	-.1015	-.2233	-.4493	-.6573	-.4845	-.1444	-.0040	.0237
90.000		.8149	.4179	-.0830	-.3884	-.2972	.0150	.1850	.2133	.1032	-.6220	-.8146	-.2764	-.0590	.0056
120.000			.5788	.0729	-.2451	-.1944	.0204	.2245	.3714	.1032	.0320	-.0971	-.1890	-.0734	.0269
135.000							.1890	.1890	.2369	.2369	.0949	-.0949	-.1030	-.1030	-.0498
150.000			.6767	.1672	-.1693	-.1519	.0038	.1728	.2894	.3650	.0218	-.1245	-.3381	-.1820	-.0091
165.000				.1837	-.1549	-.1519	-.0024	.1547	.2744	.4073	.2762	-.2689	-.3033	-.1817	-.0091
180.000	.9743	1.0790	.6787	.1658	-.1676	-.1691	-.0176	.1408	.2632	.3957	.3153	-.2662	-.2963	-.1919	-.0439
270.000		.6475							.2167						

K/LT .7460 .8330 .9280

PHI			
.000	-.0262	-.0653	-.3273
30.000	-.0290	-.0596	-.2781
60.000	-.0193	-.0511	-.1475
90.000	-.0193	-.1209	
120.000	.0759	-.2808	.4506
135.000	.0751	-.0414	.2153
150.000	.0179	.0149	.1615
165.000	.0513	.0513	.3726
180.000	.0381	.0344	.2671

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ARC11-716 1A14 04-712-S12N3-AT10 EXTERNAL TANK (RB1731)

ALPHA(1) = -10.040 BETA(5) = -1.000

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.0000	.9934	.5876	.1324	-.3403	-.6515	-.4221	-.0951	-.0074
.0000				.1324	-.3403	-.6515	-.4221	-.0951	-.0177
30.000				.1365	-.3523	-.6308	-.5735	-.1295	-.0772
60.000				.2373	-.2695	-.5702	-.3839	-.1569	-.1921
90.000			.7858	.3786	-.1502	-.4418	-.3177	.0132	.2250
120.000				.5362	.0291	-.2962	-.2229	.0075	.3756
135.000									.2282
150.000				.6450	.1347	-.2066	-.1813	-.0101	.2842
165.000					.1694	-.1726	-.1660	-.0178	.2733
180.000	.9934	1.0830		.6841	.1672	-.1718	-.1573	-.0049	.2691
270.000		.6983							.2154

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.0000	.9934	.5876	.1324	-.3403	-.6515	-.4221	-.0951	-.0074
.0000				.1324	-.3403	-.6515	-.4221	-.0951	-.0177
30.000				.1365	-.3523	-.6308	-.5735	-.1295	-.0772
60.000				.2373	-.2695	-.5702	-.3839	-.1569	-.1921
90.000			.7858	.3786	-.1502	-.4418	-.3177	.0132	.2250
120.000				.5362	.0291	-.2962	-.2229	.0075	.3756
135.000									.2282
150.000				.6450	.1347	-.2066	-.1813	-.0101	.2842
165.000					.1694	-.1726	-.1660	-.0178	.2733
180.000	.9934	1.0830		.6841	.1672	-.1718	-.1573	-.0049	.2691
270.000		.6983							.2154

ALPHA(1) = -10.040 BETA(6) = .100

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.0000	.9933	.9467	.1280	-.3481	-.6479	-.5630	-.0900	-.0161
.0000				.1280	-.3481	-.6479	-.5630	-.0900	-.0161
30.000				.1443	-.3523	-.6386	-.4029	-.1090	-.0567
60.000				.2074	-.2905	-.5871	-.3102	-.1229	-.0449
90.000		.7403		.3312	-.1738	-.4651	-.3657	.0246	.2261
120.000				.4845	-.0166	-.3333	-.2556	-.0084	.3724
135.000									.1650
150.000				.6115	.1010	-.2346	-.2022	-.0278	.2778
165.000					.1604	-.1776	-.1719	-.0091	.2703
180.000	.9933	1.0820		.6828	.1738	-.1608	-.1520	.0095	.2698
270.000		.7378							.2114

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.0000	.9933	.9467	.1280	-.3481	-.6479	-.5630	-.0900	-.0161
.0000				.1280	-.3481	-.6479	-.5630	-.0900	-.0161
30.000				.1443	-.3523	-.6386	-.4029	-.1090	-.0567
60.000				.2074	-.2905	-.5871	-.3102	-.1229	-.0449
90.000		.7403		.3312	-.1738	-.4651	-.3657	.0246	.2261
120.000				.4845	-.0166	-.3333	-.2556	-.0084	.3724
135.000									.1650
150.000				.6115	.1010	-.2346	-.2022	-.0278	.2778
165.000					.1604	-.1776	-.1719	-.0091	.2703
180.000	.9933	1.0820		.6828	.1738	-.1608	-.1520	.0095	.2698
270.000		.7378							.2114



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

ARC11-716 IAI4 Q1+T12+S12N25+AT10 EXTERNAL TANK (R81731)

ALPHA(1) = -10.040 BETA(1) = .100

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT .7480 .8330 .9280

PHI  
.000 -.0087 -.0628 -.3303  
30.000 -.0186 -.0548 -.2935  
60.000 -.0322 -.0343 -.1664  
90.000 .0146 -.0565  
120.000 .0373 -.1039 .2797  
135.000 .0464 -.0468 .0914  
150.000 -.0066 -.0322 .0464  
165.000 .0314 .0098 .1375  
180.000 .0406 .0210 .0832

ALPHA(1) = -10.040 BETA(1) = 1.810

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT .0000 .0260 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
.000 .9931 .5671 .1304 -.3515 -.6559 -.4665 -.0967 -.0073 -.0176 -.1467 -.3122 -.2464 -.0710 -.0208 .0030  
30.000 .1366 -.3565 -.6623 -.3871 -.0936 -.0058 -.0345 -.1941 -.4218 -.3192 -.1055 -.0390 -.0094  
60.000 .1818 -.3245 -.6190 -.2955 -.0936 -.0187 -.1277 -.4016 -.6306 -.4971 -.1665 -.0375 .0223  
90.000 .0003 .2881 -.2192 -.3197 .3711 .0242 .1952 .2344 .6198 .7609 .2660 .0366 .0260  
120.000 .4300 -.0710 .3052 .3053 .0242 .1942 .3708 .1071 .0480 .2051 .2365 .1076 .0032  
135.000 .5716 .0612 .2767 .2483 .0543 .1307 .2647 .3144 .1396 .4338 .4040 .2072 .0671  
150.000 .1404 .2030 .1938 .0262 .1332 .2592 .3812 .2245 .3747 .2950 .1746 .0863  
165.000 .9931 1.0840 .6867 .1662 .1772 .1700 .0081 .2652 .3836 .3172 .3275 .2830 .1970 .0319  
180.000 .7892 .2090

M/LT .7480 .8330 .9280

PHI  
.000 -.0181 -.0687 -.3290  
30.000 -.0181 -.0562 -.3072  
60.000 .0013 .0367 .1866  
90.000 .0232 .0437  
120.000 .0432 .1104 .2495  
135.000 .0336 .0704 .0167  
150.000 .0031 .0447 .0800  
165.000 .0265 .0002 .1370  
180.000 .0245 .0072 .0968

ARC11-716 IAI4 04+712+512+5+710 EXTERNAL TANK (R01731)

ALPHA(1) = -10.130 BETA(8) = 3.980

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.2000	.4000	.6000	.8000	.9000	.9500	.9800	.9900	.9950	.9980	.9990	.9995	.9998	.9999
PHI															
.000	.9776	.9354	.8225	-.3675	-.8638	-.4442	-.3994	-.0131	-.0255	-.1521	-.2950	-.2349	-.0703	-.0221	-.0102
30.000			.1193	-.3655	-.6508	-.2554	-.0770	.0109	-.0156	-.1754	-.3807	-.3292	-.0824	-.0216	-.0032
60.000			.1329	-.3520	-.6259	-.2187	-.0631	.0287	-.0985	-.3707	-.5919	-.4987	-.1375	-.0240	.0215
90.000		.6008	.2339	-.2598	-.5718	-.2335	-.0233	.2016	.2392	-.5886	-.8281	-.8201	-.2707	-.0388	.0258
120.000			.3827	-.1153	-.4374	-.3184	-.0363	.1812	.3718	-.1170	-.0641	-.2489	-.2397	-.1196	-.0079
135.000								.1294	.1972			-.2957		-.1781	
150.000			.5295	.0262	-.3148	-.2778	-.0725	.1123	.2329	-.2940	-.1906	-.4792	-.4032	-.2086	-.0662
165.000			.1161	-.2130	-.2057	-.0405	.1185	.2469	.3601	.2042	-.3539	-.2650	-.1949	-.0477	
180.000	.9776	1.0770	.6790	-.1637	-.1631	-.1592	.0217	.1466	.2531	.3760	.3120	-.3322	-.2945	-.2380	-.0502
270.000	.8295								.2081						

W/LT .7400 .8530 .9200

PHI

.000	-.0213	-.0006	-.3264
30.000	-.0144	-.0618	-.3189
60.000	-.0329	-.0418	-.2519
90.000	.0194	-.0448	
120.000	.0281	-.1741	.1953
135.000	.0134	-.0423	.0214
150.000	-.0453	-.0901	-.0654
165.000	.0137	-.0211	.1199
180.000	.0170	.0173	.0783

ALPHA(1) = -10.130 BETA(9) = 5.250

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.2000	.4000	.6000	.8000	.9000	.9500	.9800	.9900	.9950	.9980	.9990	.9995	.9998	.9999
PHI															
.000	.9982	.9346	.1086	-.3094	-.6607	-.4808	-.1185	-.0323	-.0407	-.1629	-.3107	-.2298	-.0916	-.0478	-.0311
30.000			.1002	-.3092	-.6608	-.2524	-.0732	.0199	-.0582	-.1521	-.3681	-.2995	-.0917	-.0275	-.0105
60.000			.1225	-.3032	-.6422	-.2034	-.0587	.0199	-.0783	-.3503	-.5999	-.4974	-.1534	-.0186	.0136
90.000	.6018		.1899	-.3047	-.6021	-.2034	.0182	.1987	.2436	-.5942	-.8733	-.8632	-.0313	.0133	
120.000			.3290	-.1649	-.4891	-.4010	-.0485	.1884	.3653	.1187	-.0856	-.2709	-.2474	-.1300	-.0430
135.000								.1066		.1801		-.3336		-.1824	
150.000			.4882	-.0188	-.3905	-.3417	-.0993	.0832	.2327	.2619	-.2559	-.5353	-.4056	-.2343	-.0921
165.000			.0927	-.2405	-.2408	-.0653	.0949	.2290	.3340	.1858	-.3602	-.2782	-.2248	-.0889	
180.000	.9982	1.0410	.6084	.1565	-.1767	-.1771	-.0182	.1222	.2443	.3805	.3018	-.3222	-.3519	-.2518	-.0844
270.000	.8638								.2059						

W/LT .7400 .8530 .9200

PHI

.000	-.0213	-.0006	-.3264
30.000	-.0144	-.0618	-.3189
60.000	-.0329	-.0418	-.2519
90.000	.0194	-.0448	
120.000	.0281	-.1741	.1953
135.000	.0134	-.0423	.0214
150.000	-.0453	-.0901	-.0654
165.000	.0137	-.0211	.1199
180.000	.0170	.0173	.0783

ARC11-716 1A14 00712+312030+110 EXTERNAL TANK

1561731

ALMAG (1) = -19.1 GT - 061.61 - 00136 5.293

SECTION (1) ENTERED IN "A" AND  
DEPENDENT VARIABLE IS CP

6026' 5550' 0074' 2172'

二

1000	-0.0297	-0.0807	-0.3234
30,000	-0.0270	-0.0677	-0.3277
60,000	-0.0134	-0.0494	-0.2135
90,000	-0.0020	-0.0037	
120,000	-0.0020	-0.0097	-0.1934
150,000	-0.0099	-0.0466	-0.0999
180,000	-0.0090	-0.1080	-0.0686
195,000	-0.0099	-0.0999	-0.1188
190,000	-0.0146	-0.0716	-0.0627

ALMAZ (1) = -13.123 CUL36 (10) = 7.010

SECTION ( I ) INTERNAL TAX  
DEPENDENT VARIABLE CP

1976 0000 0000 0000

**E**

100	.9395	.9096	.0949	-.3901	-.6660	-.5323	-.1365	-.0487	-.0557	-.1714	-.3263	-.2256	-.1093	-.0699	-.0423
30,000			.3791	-.4501	-.6764	-.2332	-.0655	.0237	-.0032	-.1346	-.3536	-.2925	-.0060	-.0337	-.0176
60,000			.0683	-.4066	-.6562	-.1804	-.0397	.0346	-.0297	-.3232	-.5731	-.4991	-.1534	-.0114	.2560
90,000		.5555	.1459	-.3451	-.6271	-.1920	.0294	.1966	.2436	-.5716	-.8776	-.2699	-.0595	-.0007	
120,000			.2772	-.2111	-.5296	-.4305	-.0572	.1561	.3591	.1223	-.1090	-.2675	-.2424	-.1504	-.0775
155,000								.0856		.1649		-.3594		-.2221	
190,000			.4404	-.0502	-.3671	-.3755	-.1247	.0592	.2143	.2331	-.3072	-.3773	-.3913	-.2543	-.1397
165,000				.0677	-.2647	-.2655	-.0903	.0662	.2073	.3033	.1557	-.3549	-.3053	-.2548	-.1177
100,000	.9380	1.0270	.6864	.1476	-.1903	-.1876	-.0265	.1037	.2269	.3375	.2474	-.3123	-.3665	-.2756	-.1274
70,000		.9516							.2514						

17/1	.7400	.0530	.9200
------	-------	-------	-------

7

100,000	-0.063	-0.0604	-0.3239
30,000	-0.063	-0.061	-0.334
10,000	-0.016	-0.0563	-0.2230
5,000	-0.048	-0.0706	
150,000	-0.3236	-0.021	1.489
135,000	-0.0563	-0.0611	-0.0330
120,000	-0.0664	-0.1249	-0.104
105,000	-0.061	-0.0333	0.070
90,000	-0.0966	-0.0319	0.0563



ARC11-716 IA14 O1+T12+S12M25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 1 ) = -10.130 BETA( 11 ) = 8.780

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI															
.000	.9069	.4750	.0765	-.4045	-.6778	-.5784	-.1603	-.0638	-.0712	-.1775	-.3349	-.2011	-.1138	-.0891	-.0487
30.000			.0492	-.4258	-.6837	-.2088	-.9570	.0300	.0055	-.1237	-.3538	-.2657	-.0936	-.0392	-.0323
60.000			.0598	-.4253	-.6338	-.1532	-.0234	.0460	-.0214	-.3013	-.5658	-.4894	-.1243	-.0118	.0015
90.000		.4971	.0996	-.3812	-.6531	-.1723	.0240	.2016	.2471		-.5668	-.8546	-.2427	-.0474	-.0116
120.000			.2224	-.2655	-.5593	-.4321	-.0635	.1438	.3546	.1200	-.1145	-.3120	-.2577	-.1747	-.1122
135.000								.0628		.1481		-.3868		-.2444	
150.000			.3955	-.0970	-.4164	-.4046	-.1514	.0329	.1915	.1821	-.3454	-.6292	-.3963	-.2801	-.1747
165.000				.0475	-.2813	-.2788	-.1227	.0391	.1833	.2592	.1432	-.3564	-.3437	-.2816	-.1499
180.000	.9069	.9993	.6455	.1429	-.1870	-.1882	-.0420	.0939	.2025	.3211	.2730	-.5113	-.4200	-.3079	-.1720
270.000		.9355							.2030						

X/LT .7460 .8530 .9280

PHI															
.000	-.0464	-.0884	-.3186												
30.000	-.0440	-.0851	-.3393												
60.000	-.0227	-.0644	-.2182												
90.000	-.0318	-.0971													
120.000	-.0474	-.1377	.1368												
135.000	-.0440	-.0734	-.0537												
150.000	-.1093	-.1447	-.1646												
165.000	-.0652	-.0577	.0378												
180.000	-.0983	-.0664	.0514												

ALPHA( 2 ) = -6.110 BETA( 1 ) = -8.350

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI															
.000	.9993	.5555	.1440	-.3567	-.6473	-.6723	-.1469	-.0531	-.0673	-.1911	-.2883	-.1798	-.1055	-.0844	-.0312
30.000			.2439	-.2539	-.5696	-.5640	-.2855	-.1491	-.1795	-.4157	-.4304	-.2239	-.1242	-.0991	-.0711
60.000			.4054	-.0982	-.3977	-.3522	-.2228	-.1070	-.2042	-.5453	-.6863	-.3492	-.0801	.0486	.0057
90.000		.9713	.5867	.0811	-.2204	-.1572	.0488	.2229	.2838		-.6582	-.6703	-.1168	-.0039	.0097
120.000			.7208	.1971	-.1215	-.0953	.0699	.2531	.3516	.0259	.1036	.0175	-.0545	-.0180	.0475
135.000								.2061		.2279		-.0027		-.0487	
150.000			.7180	.2107	-.1229	-.1166	.0122	.1730	.2558	.3818	.2419	.0205	-.2488	-.1633	-.0467
165.000				.1563	-.1773	-.1785	-.0355	.1206	.2269	.3843	.3413	-.1656	-.3016	-.1787	-.0407
180.000	.9993	1.0190	.5980	.0908	-.2358	-.2363	-.0631	.0894	.2064	.3534	.2952	-.3300	-.3417	-.2415	-.0865
270.000		.9547							.3174						

X/LT .7460 .8530 .9280

PHI



TABULATED PRESSURE DATA - IA14A - VOL. 9

DATE 06 JAN 75

(R81731)

ARC11-716 IA14 01+112+512N25+AT10 EXTERNAL TANK

ALPHA( 2 ) = -0.110 BETA( 1 ) = -0.350

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .6530 .9280

PHI

.000 -.0465 -.0891 -.3143  
30.000 -.0676 -.0739 -.2577  
60.000 -.0261 -.0467 -.1265  
90.000 -.0490 -.2154  
120.000 .1122 -.1748 .5903  
135.000 .1220 .0459 .3380  
150.000 .0603 .1197 .3445  
165.000 .0657 .1229 .4734  
180.000 .0293 .0811 .3004

ALPHA( 2 ) = -0.120 BETA( 2 ) = -0.640

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 .9885 .5806 .1550 -.3468 -.6410 -.6755 -.1198 -.0362 -.0510 -.1833 -.2723 -.1767 -.0679 -.0626 -.0484  
30.000 .2343 -.2667 -.5895 -.2070 -.1145 -.1145 -.1145 -.1145 -.1145 -.3705 -.3937 -.2260 -.1098 -.0783 -.0526  
60.000 .3726 -.1335 -.4381 -.3555 -.2073 -.0839 -.1822 -.5181 -.6891 -.3728 -.0971 .0354 .0195  
90.000 .9339 .5377 .0306 -.2791 -.1880 .0335 .2196 .2837 -.6531 -.6950 -.1338 -.0555 .0198  
120.000 .6572 .1467 -.1777 -.1348 .0655 .2406 .3489 .0160 .0742 -.0248 -.1023 -.0448 .0377  
135.000 .6006 .1755 -.1578 -.1372 .0018 .1722 .2585 .3668 .1409 -.0317 -.2788 -.1677 -.0380  
150.000 .1427 -.1873 -.1814 -.0302 .1293 .2360 .3843 .3143 -.2072 -.2888 -.1724 -.0210  
165.000 .5285 1.0350 .6123 .0980 -.2300 -.2224 -.0486 .2214 .3635 .2988 -.2320 -.3353 -.2187 -.0555  
180.000 .6121  
270.000

X/LT .7460 .6530 .9280

PHI

.000 -.0323 -.0751 -.3169  
30.000 -.0420 -.0631 -.2592  
60.000 -.0140 -.0282 -.1222  
90.000 -.2081 -.1208  
120.000 .1022 -.1883 .5686  
135.000 .1055 .0333 .3254  
150.000 .0955 .1048 .2967  
165.000 .0626 .1133 .4577  
180.000 .0333 .0791 .2880

ARC11-716 IA14 OA+T12+312N25+AT10 EXTERNAL TANK

(R81731)

ALPHA( 2) = -8.120 BETA( 3) = -4.940

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0060	.5992	.1703	-.3328	-.6404	-.6436	-.0939	-.0207	-.0360	-.1741	-.2672	-.1686	-.0712	-.0412
30.000				.2282	-.2790	-.5940	-.5977	-.1732	-.0822	-.1123	-.3286	-.3423	-.2155	-.1044	-.0607
60.000				.3434	-.1649	-.4833	-.3633	-.1731	-.0616	-.1620	-.4866	-.6754	-.3730	-.1204	.0146
90.000			.8971	.4943	-.0178	-.3273	-.2176	.0269	.2201	.2860	-.6521	-.7035	-.1583	-.0069	.0268
120.000				.6150	.1048	-.2171	-.1724	.0737	.2335	.3529	.0094	.0408	-.0640	-.1384	.0314
135.000								.1909			.2066		-.0760	-.0900	
150.000				.5689	.1496	-.1830	-.1611	-.0038	.1676	.2614	.3553	.0603	-.0340	-.3106	-.0492
165.000				.1374	-.2019	-.1928	-.0261	.1329	.2431	.3661	.2923	-.2405	-.2916	-.1927	-.0148
180.000	1.0060	1.0440	.6246	.1034	-.2279	-.2210	-.0335	.1136	.2355	.3711	.3029	-.2480	-.2979	-.2193	-.0457
270.000		.6484							.3004						

X/LT .7460 .8530 .9280

## PHI

.000	-.0279	-.0630	-.3187
30.000	-.0303	-.0313	-.2628
60.000	-.0061	-.0157	-.1273
90.000	.0154	-.0605	
120.000	.0920	-.2032	.5411
135.000	.0954	.0178	.3007
150.000	.0428	.0872	.2627
165.000	.0650	.1011	.4070
180.000	.0446	.0726	.2627

ALPHA( 2) = -8.130 BETA( 4) = -3.270

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0220	.6123	.1788	-.3301	-.6290	-.6147	-.0872	-.0080	-.0241	-.1604	-.2583	-.1720	-.0619	-.0113
30.000				.2199	-.2888	-.5947	-.5799	-.1424	-.0323	-.0846	-.2869	-.3652	-.2000	-.0987	-.0404
60.000				.3178	-.1928	-.5106	-.3491	-.1416	-.0354	-.1313	-.4535	-.6607	-.3998	-.1192	-.0038
90.000		.8607		.4468	-.0600	-.3773	-.2297	.0272	.2309		-.6312	-.6999	-.1776	-.0110	.0284
120.000				.5736	.0591	-.2619	-.1941	.0578	.2240	.3542	.0157	.0159	-.0981	-.1671	-.0739
135.000								.1844			.2015		-.0976	-.1077	
150.000				.6408	.1283	-.2116	-.1833	-.0132	.1621	.2615	.3427	.0970	-.1151	-.3221	-.1977
165.000				.1274	-.1994	-.1892	-.0231	.1379	.2494	.3854	.2636	-.2717	-.2936	-.1854	-.0093
180.000	1.0220	1.0470	.6324	.1104	-.2212	-.2037	-.0250	.1312	.2410	.3777	.3026	-.2787	-.2903	-.1692	-.0384
270.000		.6917							.2940						

X/LT .7460 .8530 .9280

## PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4499

ARC11-716 IA14 Q1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA(2) = -8.130 BETA(4) = -3.270

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8300 .9280

PMI

.000	-.0192	-.0354	-.3203
30.000	-.0199	-.0427	-.2667
60.000	-.0065	-.0082	-.1370
90.000	.0319	-.0275	
120.000	.0861	-.2002	.4903
135.000	.0966	.0044	.2531
150.000	.0314	.0582	.2132
165.000	.0656	.0838	.3790
180.000	.0498	.0635	.2739

ALPHA(2) = -8.130 BETA(5) = -1.600

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

.000	1.0340	.6243	.1871	-.3309	-.6190	-.5227	-.0909	-.0048	-.0205	-.1593	-.2639	-.1623	-.0311	-.0128	.0010
30.000			.2128	-.3040	-.6026	-.5623	-.1201	-.0311	-.0612	-.2597	-.3861	-.2016	-.0883	-.0423	-.0175
60.000			.2885	-.2243	-.5431	-.3166	-.1140	-.0162	-.1077	-.4233	-.6449	-.4046	-.1131	-.0173	.0269
90.000		.6213	.4041	-.1134	-.4284	-.2304	.0239	.2244	.2921	-.6234	-.7066	-.1928	-.0180	.0312	
120.000			.5235	.0143	-.3088	-.2191	.0110	.2150	.3509	.0264	-.0136	-.1373	-.1978	-.0874	.0198
135.000								.1711	.1925	.1925		-.1451	-.1230		
150.000			.6102	.0947	-.2390	-.2071	-.0229	.1520	.2615	.3312	-.0267	-.2286	-.3488	-.2054	-.0378
165.000				.1160	-.2203	-.2019	-.0284	.1351	.2472	.3809	.2449	-.3343	-.3168	-.1868	-.0121
180.000	1.0340	1.0450	.6329	.1084	-.2169	-.2014	-.0170	.1346	.2430	.3753	.3093	-.3046	-.2918	-.1803	-.0212
270.000		.7396							.2882						

X/LT .7480 .8300 .9280

PMI

.000	-.0136	-.0338	-.3840
30.000	-.0156	-.0408	-.2798
60.000	.0099	-.0108	-.1487
90.000	.0337	-.0172	
120.000	.0706	-.1899	.3933
135.000	.0693	-.0075	.1704
150.000	.0118	.0279	.1188
165.000	.0328	.0582	.321
180.000	.0366	.0451	.2583

ORIGINAL PAGE IS  
OF POOR QUALITY

## ARC11-716 1A14 CL-712-S12N25-A11D EXTERNAL TANK

(R81731)

ALPHAO( 2 ) = -8.130 BETA0 ( 6 ) = .010

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5090	.5980	.6380
PHI															
.000	1.0390	.6192	.1765	-.3356	-.6204	-.5900	-.0922	-.0080	-.0181	-.1598	-.3105	-.1731	-.0568	-.0127	-.0008
30.000			.1931	-.3212	-.6185	-.5018	-.1023	-.0165	-.0384	-.2297	-.4072	-.2187	-.0847	-.0444	-.0202
60.000			.2486	-.2629	-.5727	-.2997	-.3946	-.0013	-.0889	-.4092	-.6388	-.4272	-.1119	-.0308	.0118
90.000		.7795	.3549	-.1587	-.4821	-.2290	.0228	.2186	.2928		-.6160	-.7051	-.2204	-.0252	.0223
120.000			.4777	-.0365	-.3684	-.2375	-.0023	.2040	.3505	.0224	-.0409	-.1754	-.2217	-.0995	.0091
135.000								.1584		.1804		-.1916		-.1395	
150.000			.5781	.0580	-.2850	-.2305	-.0411	.1376	.2338	.3103	-.0702	-.3442	-.3797	-.2192	-.0893
165.000			.0990		-.2416	-.2091	-.0358	.1237	.2419	.3720	.2223	-.3851	-.3310	-.2019	-.0280
180.000	1.0390	1.0470	.6344	.1089	-.2335	-.2052	-.0214	.1292	.2419	.3673	.3047	-.3107	-.2747	-.1912	-.0169
270.000		.7768													.2803

X/LT .7460 .8530 .9280

PHI

.000	-.0124	-.0593	-.3303
30.000	-.0154	-.0461	-.2958
60.000	.0101	-.0154	-.1590
90.000	.0299	-.0199	
120.000	.0537	-.1516	.3090
135.000	.0505	-.0279	.1119
150.000	-.0944	-.0144	.0605
165.000	.0317	.0262	.1581
180.000	.0431	.0389	.0811

ALPHAO( 2 ) = -8.120 BETA0 ( 7 ) = 1.700

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5090	.5980	.6380
PHI															
.000	1.0290	.6223	.1772	-.3312	-.6219	-.6165	-.0921	-.0083	-.0217	-.1583	-.2516	-.1636	-.0541	-.0146	-.0027
30.000			.1821	-.3302	-.6231	-.4219	-.0887	.0033	-.0205	-.2126	-.3386	-.2110	-.0673	-.0336	-.0190
60.000			.2229	-.2631	-.5814	-.2568	-.0649	.0244	-.0614	-.3798	-.6195	-.4263	-.0941	-.0222	.0040
90.000		.7390	.3097	-.2031	-.5221	-.2226	.0370	.2325	.2999		-.5990	-.7375	-.2246	-.0324	.0201
120.000			.4283	-.0826	-.4180	-.2683	-.0064	.1990	.3502	.0332	-.0666	-.2033	-.2183	-.1003	.0003
135.000								.1480		.1722		-.2375		-.1593	
150.000			.5410	.0222	-.3148	-.2580	-.0527	.1292	.2496	.2939	-.1471	-.4330	-.3900	-.2049	-.0670
165.000			.0857		-.2555	-.2214	-.0406	.1193	.2399	.3589	.2056	-.3763	-.2868	-.1740	-.0277
180.000	1.0290	1.0480	.6322	.1097	-.2309	-.2061	-.0180	.1306	.2399	.3584	.3018	-.3485	-.2710	-.2074	-.0302
270.000		.8181													.2771

X/LT .7460 .8530 .9280

PHI

.000	-.0124	-.0593	-.3303
30.000	-.0154	-.0461	-.2958
60.000	.0101	-.0154	-.1590
90.000	.0299	-.0199	
120.000	.0537	-.1516	.3090
135.000	.0505	-.0279	.1119
150.000	-.0944	-.0144	.0605
165.000	.0317	.0262	.1581
180.000	.0431	.0389	.0811



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14A - VOL. 9

(RB1731)

ARC11-716 IAI14 OL+T12-S12N25+AT10 EXTERNAL TANK

ALPHA( 2 ) = -8.120 BETA( 7 ) = 1.700

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI  
 .000 -0.0131 -0.0348 -0.3245  
 30.000 -0.0158 -0.0481 -0.3068  
 60.000 .0023 -0.0200 -0.1774  
 90.000 .0768 -0.0214 -0.2654  
 120.000 .0468 -0.0995 -0.2654  
 135.000 .0384 -0.0468 -0.0297  
 150.000 .0036 -0.0219 -0.0483  
 165.000 .0331 -0.0180 -0.1384  
 180.000 .0339 .0307 .0954

ALPHA( 2 ) = -8.110 BETA( 8 ) = 3.340

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI  
 .000 1.0230 .6102 .1685 -.3365 -.6357 -.5966 -.1048 -.0190 -.0297 -.1660 -.2791 -.1694 -.0604 -.0245 -.0203  
 30.000 .0000 .0000 .1685 -.3365 -.6274 -.3377 -.0809 .0123 -.0064 -.1953 -.3721 -.2268 -.0541 -.0314 -.0183  
 60.000 .0000 .0000 .1945 -.3206 -.6082 -.2612 -.0449 .0431 -.0346 -.3649 -.6011 -.4296 -.0927 -.0230 .0032  
 90.000 .0000 .0000 .6928 .2607 -.2436 -.5587 -.2137 .0428 .2378 .3044 -.5989 -.7034 -.2126 -.0357 .0139  
 120.000 .0000 .0000 .3819 -.1315 -.4649 -.2757 -.0195 .1907 .3475 .0423 -.0886 -.2370 -.2341 -.1154 -.0116  
 135.000 .0000 .0000 .4994 -.0124 -.3542 -.2934 -.0698 .1324 .1646 .1646 .2964 -.1728  
 150.000 .0000 .0000 .0665 -.2678 -.2459 -.0583 .1078 .2383 .2757 -.2044 -.5123 -.4085 -.2122 -.0742  
 165.000 .0000 .0000 .1016 -.2255 -.2088 -.0275 .1001 .2282 .3431 .1833 -.3663 -.2706 -.1865 -.0531  
 180.000 .0000 .0000 .6236 .1016 -.2255 -.2088 -.0275 .1172 .2272 .3510 .2953 -.3457 -.2924 -.2426 -.0531  
 270.000 .0000 .0000 .8584 .2745

X/LT .7460 .8330 .9280

PHI  
 .000 -0.0235 -0.0577 -0.3266  
 30.000 -0.0168 -0.0532 -0.3206  
 60.000 -0.0032 -0.0307 -0.2021  
 90.000 .0193 -0.0322 -0.2094  
 120.000 .0260 -0.0919 -0.2094  
 135.000 .0173 -0.0305 .0034  
 150.000 -0.0300 -0.0824 -0.0756  
 165.000 -0.0168 -0.0128 .1900  
 180.000 .0233 .0302 .0672

ARC11-716 1A14 08+712+512N25+AT10 EXTERNAL TANK (RB1731)

ALPHA(1,2) = -8.090 BETA(1,9) = 4.950

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	1.0050	.5962	.1647	-.3369	-.6269	-.6468	-.1118	-.0239	-.0390	-.1712	-.2732	-.1611	-.0712	-.0350	-.0321
30.000			.1514	-.3423	-.6397	-.3115	-.0729	.0255	.0082	-.1724	-.3563	-.2099	-.0352	-.0247	-.0183
60.000			.1642	-.3418	-.6245	-.1931	-.0214	.0634	-.0111	-.3349	-.5950	-.4212	-.0767	-.0136	-.0027
90.000		.5482	.2219	-.2783	-.5793	-.1768	.0477	.2301	.3177	-.3987	-.7548	-.1845	-.0340	.0029	
120.000			.3315	-.1662	-.4893	-.2917	-.0217	.1797	.3478	.0536	-.1067	-.2550	-.2319	-.1144	-.0395
135.000								.1178		.1548		-.3250		-.1779	
150.000			.4576	-.0903	-.3912	-.3536	-.0878	.0916	.2294	.2518	-.2518	-.5214	-.4013	-.2285	-.0909
165.000				.0476	-.2944	-.2749	-.0739	.0859	.2159	.3205	.1706	-.3659	-.2740	-.2142	-.0852
180.000	1.0050	1.0260	.6168	.1007	-.2404	-.2179	-.0340	.1034	.2216	.3397	.2888	-.3079	-.3345	-.2496	-.0770
270.000		.9002							.2745						

X/LT .7460 .8530 .9280

## PHI

.000	-.0244	-.0592	-.3189
30.000	-.0276	-.0559	-.3241
60.000	-.0089	-.0318	-.2094
90.000	.0098	-.0306	
120.000	.0079	-.0746	.1699
135.000	.0012	-.0358	-.0059
150.000	-.0632	-.0895	-.0908
165.000	.0075	-.0034	.1145
180.000	-.0034	.0161	.0958

ALPHA(1,2) = -8.080 BETA(1,10) = 6.750

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	.9817	.5728	.1525	-.3570	-.6372	-.6642	-.1262	-.0400	-.0566	-.1772	-.2929	-.1633	-.0790	-.0567	-.0425
30.000			.1271	-.3470	-.6563	-.2789	-.0375	.0349	.0105	-.1537	-.3432	-.2189	-.0952	-.0249	-.0244
60.000			.1289	-.3637	-.6426	-.1716	-.0094	.0782	.0053	-.3116	-.5804	-.4123	-.0724	-.0086	-.0010
90.000		.5987	.1736	-.3274	-.6085	-.1644	.0428	.2280	.3201	-.5919	-.6728	-.1837	-.0373	-.0049	
120.000			.2608	-.2147	-.5303	-.2904	-.0314	.1712	.3455	.0574	-.1303	-.2771	-.2279	-.1472	-.0748
135.000								.1005		.1458		-.3494		-.2130	
150.000			.4150	-.0926	-.4080	-.3767	-.1072	.0681	.2129	.2254	-.3113	-.5677	-.3702	-.2325	-.1374
165.000				.0177	-.3081	-.2914	-.0926	.0614	.1924	.2860	.1434	-.3572	-.2895	-.2493	-.1170
180.000	.9817	.9728	.6031	.0849	-.2414	-.2360	-.0475	.0879	.2020	.3171	.2771	-.3215	-.3649	-.2622	-.1180
270.000		.9368							.2708						

X/LT .7460 .8530 .9280

## PHI

.000			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			
270.000			



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4503

(R01T31)

ARC11-716 1A14 01+T12+S12Q5+AT10 EXTERNAL TANK

ALPHA( 2) = -8.080 BETA( 10) = 6.750

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.0303	-.0732	-.3227
30.000	-.0310	-.0675	-.3312
60.000	-.0118	-.0361	-.2140
90.000	-.0044	-.0445	
120.000	-.0115	-.0814	.1620
135.000	-.0147	-.0361	-.0226
150.000	-.0862	-.1036	-.1247
165.000	-.0279	-.0169	.0842
180.000	-.0435	-.0100	.0832

ALPHA( 2) = -8.090 BETA( 11) = 8.570

SECTION ( 1) EXTERNAL TANK DEFENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	.9304	.5363	.1272	-.3702	-.6558	-.6752	-.1555	-.0644	-.0776	-.1941	-.2991	-.1721	-.1031	-.0856	-.0535
30.000			.0877	-.4030	-.6824	-.2506	-.0501	.0380	.0127	-.1483	-.3423	-.2129	-.0671	-.0467	-.0503
60.000			.0837	-.4025	-.6666	-.1565	-.0786	.0754	.0194	-.2996	-.5961	-.3969	-.0766	-.0237	-.0158
90.000	.5437		.1255	-.3712	-.6411	-.1560	.0400	.2217	.3218	-.5943	-.5552	-.5552	-.1811	-.0433	-.0237
120.000			.2285	-.2677	-.5745	-.3182	-.0388	.1610	.3357	.0320	-.1506	-.3282	-.2389	-.1746	-.1050
135.000			.3693	-.1331	-.4558	-.4406	-.1330	.0427	.0806	.1289	-.3932	-.3932	-.2942	-.2942	-.1666
150.000				-.0084	-.3361	-.3312	-.1283	.0296	.1682	.2489	.1207	-.3757	-.3472	-.2844	-.1507
180.000	.9304	.9271	.5897	.0768	-.2600	-.2509	-.0701	.0630	.1769	.2959	.2558	-.4995	-.4277	-.3013	-.1711
270.000		.9733							.2679						

X/LT .7460 .8530 .9280

PHI

.000	-.0542	-.0928	-.3239
30.000	-.0489	-.0798	-.3354
60.000	-.0267	-.0521	-.2184
90.000	-.0260	-.0736	
120.000	-.0368	-.1171	.1493
135.000	-.0363	-.0533	-.0426
150.000	-.1056	-.1273	-.1566
165.000	-.0376	-.0398	.0566
180.000	-.0896	-.0476	.0742

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ARC11-716 1A14 ON+T2+312M25+AT10 EXTERNAL TANK

(R81731)

ALPHA( 3 ) = -6.100 BETA( 1 ) = -8.140

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5880	.6380
PHI															
.000	.9972	.6157	.1932	-.3081	-.8190	-.6558	-.1371	-.0514	-.0648	-.1865	-.2763	-.1854	-.0942	-.0683	-.0397
30.000			.3021	-.2026	-.5315	-.5330	-.2399	-.1139	-.1494	-.4300	-.3999	-.1669	-.1180	-.0882	-.0617
60.000			.4500	-.0609	-.3706	-.3215	-.1650	-.0388	-.1142	-.5690	-.6661	-.2840	-.0388	.0223	.0178
90.000		.9967	.5972	.0870	-.2180	-.1548	.0617	.2455	.3388		-.6409	-.6056	-.1279	-.0054	.0228
120.000			.6768	.1639	-.1565	-.1280	.0540	.2284	.3098	-.1149	.0758	.0107	-.0615	-.0306	.0435
135.000							.1757		.1768			-.0104		-.0594	
150.000			.6657	.1570	-.1827	-.1687	-.0234	.1416	.2168	.3489	.2296	-.0373	-.2613	-.1622	-.0442
165.000				.0956	-.2377	-.2305	-.0631	.0904	.1958	.3575	.3269	-.1699	-.2873	-.1773	-.0360
180.000	.9972	.9851	.5449	.0298	-.2965	-.2781	-.0800	.0676	.1879	.3343	.2857	-.2620	-.3349	-.2308	-.0771
270.000	.9316														
X/LT	.7480	.8530	.9280												

PHI

.000	-.0487	-.0842	-.3194												
30.000	-.0580	-.0657	-.2728												
60.000	.0035	.0061	-.1186												
90.000	.0077	-.1057													
120.000	.1219	-.1039	.6065												
135.000	.1281	.0837	.3519												
150.000	.0748	.1469	.7658												
165.000	.0815	.1491	.4870												
180.000	.0485	.1030	.3046												

ALPHA( 3 ) = -6.110 BETA( 2 ) = -8.480

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5880	.6380
PHI															
.000	1.0250	.6416	.3125	-.3009	-.8058	-.6502	-.1026	-.0301	-.0449	-.1659	-.2674	-.1355	-.0779	-.0380	-.0409
30.000			.2987	-.2155	-.5466	-.5434	-.1883	-.0841	-.1149	-.3831	-.3741	-.1749	-.1043	-.0734	-.0447
60.000			.4213	-.0980	-.4175	-.3456	-.1397	-.0192	-.0935	-.5327	-.6491	-.3312	-.0719	.0099	.0239
90.000		.9994	.5517	.0380	-.2799	-.1856	.0533	.2444	.3414		-.6265	-.6217	-.1480	-.0089	.0239
120.000			.6355	.1166	-.2055	-.1614	.0471	.2232	.3147	-.1365	.0407	.0261	-.1051	-.0534	.0336
135.000							.1742		.1851			-.0520		-.0839	
150.000			.6437	.1178	-.2108	-.1886	-.0229	.1438	.2253	.3360	.1438	-.0368	-.2774	-.1711	-.0377
165.000				.0846	-.2473	-.2393	-.0576	.0988	.2090	.3607	.3025	-.2096	-.2973	-.1780	-.0178
180.000	1.0280	.9991	.5593	.0374	-.2919	-.2765	-.0643	.0800	.2033	.3447	.2894	-.2322	-.3399	-.2197	-.0502
270.000	.6434														
X/LT	.7480	.8530	.9280												

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 CR+T12+S12N29+AT10 EXTERNAL TANK (NB1731)

ALPHA( 3) = -6.110 BETA( 2) = -6.480

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PMI  
 .000 -.0331 -.0647 -.3165  
 30.000 -.0335 -.0497 -.2691  
 60.000 .0067 .0123 -.1165  
 90.000 .0264 -.0398 .5667  
 120.000 .1098 -.0966 .5667  
 135.000 .1132 .0755 .3425  
 150.000 .0685 .1349 .3247  
 165.000 .0824 .1404 .4651  
 180.000 .0834 .1015 .2932

ALPHA( 3) = -6.130 BETA( 3) = -4.620

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5380 .6380

PMI  
 .000 1.0430 .6557 .2213 -.3010 -.6392 -.6043 -.0796 -.0195 -.0339 -.1783 -.2615 -.1579 -.0621 -.0332 -.0247  
 30.000 .2855 -.2318 -.5564 -.5625 -.1809 -.0997 -.0883 -.3325 -.3325 -.4974 -.6391 -.3546 -.0079 .0027 .0189  
 60.000 .3679 -.1277 -.4574 -.3538 -.2223 -.0054 -.0784 .3405 .0121 .6613 .0178 .0233 .0228  
 90.000 .9252 .2046 -.0119 -.3208 .2002 .0436 .2416 .3172 .0138 .0666 .1334 -.0765 .0228  
 120.000 .5929 .0719 -.2474 -.1870 .0511 .1585 .1575 .1575 .1575 .1575 .1575 .1575 .1575 .1575  
 135.000 .6223 .0976 -.2447 -.2056 -.0270 .1420 .2282 .3256 .0504 -.0596 .3023 -.1880 -.0475  
 150.000 .0755 -.2802 .2327 -.0908 .1086 .2126 .3600 .2776 .2445 .2965 .1949 .0126  
 165.000 .5674 .0414 -.2879 .2397 .0520 .0959 .2069 .3476 .2910 .2678 .2935 .1216 .0396  
 180.000 .6834 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666  
 270.000 .6834 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666 .5666

X/LT .7460 .8330 .9280

PMI  
 .000 -.0287 -.0993 -.3190  
 30.000 -.0322 -.0423 -.2740  
 60.000 .0072 .0103 .1301  
 90.000 .3313 .0133 .5486  
 120.000 .3937 .1328 .5486  
 135.000 .1014 .0348 .3156  
 150.000 .0528 .1139 .2888  
 165.000 .0774 .1268 .4134  
 180.000 .0556 .0955 .2622

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DATE 06 JAN 79 TABULATED PRESSURE DATA - IAI44 - VOL. 9

(RB1731)

ARC11-716 IAI4 01-712-312-25-AT10 EXTERNAL TANK

ALMAO( 3 ) = -6.140 BETA0 ( 4 ) = -3.220

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE C=

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0580	.6876	.2325	-.2930	-.5925	-.6311	-.0947	-.0086	-.0210	-.1640	-.2481	-.1526	-.0303	-.0161	-.0104
30.000			.2755	-.2430	-.5583	-.5772	-.1365	-.0329	-.0537	-.2819	-.3356	-.1776	-.0774	-.0485	-.0245
60.000			.3805	-.1621	-.4853	-.3692	-.0982	.0147	-.0543	-.4660	-.6128	-.3642	-.0689	-.0062	-.0189
90.000			.6929	.4648	-.0523	-.3716	.0452	.2460	.3471		-.5071	-.6643	-.1590	-.0215	.0226
120.000			.5516	.0358	-.2927	-.2056	.0489	.2137	.3216	-.1170	-.0119	-.0996	-.1577	-.0884	.0176
135.000								.1646		.1530		-.1041		-.1148	
150.000			.5966	.0722	-.2610	-.2132	-.0267	.1400	.2326	.3127	-.0218	-.1123	-.3134	-.1980	-.0521
165.000				.0746	-.2664	-.2290	-.0430	.1157	.2212	.3591	.2538	-.2714	-.2934	-.1947	-.0129
180.000	1.0580	1.0080	.5761	.0487	-.2794	-.2405	-.0383	.1115	.2163	.3500	.2929	-.2989	-.2816	-.1915	-.0391
270.000		.7269							.3599						

W/LT .7480 .6530 .9280

PMI

.000	-.0168	-.0513	-.3209
30.000	-.0185	-.0358	-.2756
60.000	.0134	.0118	-.1411
90.000	.0369	.0017	
120.000	.0855	-.1360	.5076
135.000	.0694	.0401	.2690
150.000	.0463	.0691	.2392
165.000	.0747	.1132	.3778
180.000	.0610	.0849	.2755

ALMAO( 3 ) = -6.030 BETA0 ( 5 ) = -1.620

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0650	.6806	.2368	-.2944	-.5943	-.5850	-.0969	-.0046	-.0174	-.1612	-.2271	-.1520	-.0415	-.0145	-.0026
30.000			.2655	-.2801	-.5661	-.5247	-.1177	-.0155	-.0432	-.2639	-.2999	-.1853	-.0852	-.0375	-.0187
60.000			.3329	-.1922	-.5143	-.3211	-.0785	.0340	-.0362	-.4371	-.5986	-.3909	-.0662	-.0117	.0140
90.000			.6325	-.0994	-.4282	-.2107	.0454	.2480	.3505		-.5601	-.7290	-.1580	-.0224	.0221
120.000			.5104	-.0162	-.3375	-.2342	.0189	.2056	.3217	-.1002	-.0437	-.1363	-.1848	-.0916	.0096
135.000								.1610		.1494		-.1450		-.1329	
150.000			.5667	.0433	-.2931	-.2315	-.0326	.1359	.2337	.3000	-.0457	-.2103	-.3361	-.2161	-.0584
165.000				.0576	-.2738	-.2406	-.0435	.1129	.2218	.3521	.2296	-.3336	-.3118	-.1957	-.0134
180.000	1.0650	1.0040	.5746	.0476	-.2804	-.2455	-.0333	.1137	.2194	.3486	.2917	-.3226	-.2843	-.1800	-.0231
270.000		.7683							.3531						

W/LT .7480 .6530 .9280

PMI

.000	-.0168	-.0513	-.3209
30.000	-.0185	-.0358	-.2756
60.000	.0134	.0118	-.1411
90.000	.0369	.0017	
120.000	.0855	-.1360	.5076
135.000	.0694	.0401	.2690
150.000	.0463	.0691	.2392
165.000	.0747	.1132	.3778
180.000	.0610	.0849	.2755

DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4907

ARC11-716 1A14 01-712-512H25-AT10 EXTERNAL TANK (0801731)

ALPHA( 3) = -6.030 BETA( 5) = -1.620

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/L .7460 .8530 .9280

PHI	0.000	-0.112	-0.475	-3.193
30.000	-0.0132	-0.0306	-0.2858	
60.000	0.0078	0.0057	-1.1346	
90.000	0.0334	0.0049		
120.000	0.0735	-1.1367	4.225	
135.000	0.0712	0.0275	1.090	
150.000	0.0213	0.0538	1.169	
165.000	0.0693	0.0820	3.515	
180.000	0.0469	0.0661	2.526	

ALPHA( 3) = -6.030 BETA( 6) = .000

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/L .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI	0.000	1.0000	0.8039	0.2379	-2.884	-1.9993	-6.401	-0.9999	0.0008	-0.116	-1.990	-2.238	-1.569	-0.412	-0.121	-0.010
30.000				0.2339	-2.721	-1.5080	-0.5337	-0.0919	0.0048	-0.0205	-2.375	-3.095	-2.078	-0.915	-0.363	-0.0198
60.000				0.3044	-2.182	-1.5429	-0.2741	-0.574	0.557	-0.116	-4.075	-5.798	-4.163	-0.685	-0.116	0.0081
90.000			0.8126	0.3776	-1.1361	-4.724	-1.967	0.508	2.554	3.990		-5.681	-1.7936	-1.564	-0.232	0.0190
120.000				0.4679	-0.519	-3.987	-2.643	0.115	2.332	3.266	-0.921	-0.709	-1.704	-2.041	-1.054	0.0072
135.000									1.549	1.448			-1.894			
150.000				0.5346	0.116	-3.429	-2.459	-0.457	1.324	2.743	2.901	-0.692	-3.272	-3.569	-2.475	-0.0696
165.000					0.425	-2.941	-2.459	-0.497	1.999	2.220	3.476	2.077	-3.724	-3.185	-2.062	-0.0239
180.000		1.0000	1.0010	0.5781	0.481	-2.851	-2.395	-0.348	1.136	2.203	3.429	2.911	-3.262	-2.708	-1.950	-0.178
270.000			0.8118						3.503							

M/L .7460 .8530 .9280

PHI	0.000	-0.0064	-0.0475	-3.141
30.000	-0.0123	-0.0343	-0.2916	
60.000	0.0047	0.0009	-1.1632	
90.000	0.0333	0.0034		
120.000	0.0617	-1.1133	3.580	
135.000	0.0373	0.0226	1.280	
150.000	0.0076	0.0182	0.844	
165.000	0.0437	0.0480	1.501	
180.000	0.0352	0.0604	0.797	

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ARC11-716 1A14 01-712-312M23-AT1D EXTERNAL TANK (R01731)

ALPHA( 3) = -6.330 BETA( 7) = 1.640

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2120	.2420	.2900	.3440	.3940	.4310	.5050	.5900	.6300
PMI															
.000	1.0640	.0844	.2376	-.2008	-.5924	-.6427	-.0826	.0024	-.0100	-.1633	-.2440	-.1631	-.0478	-.0071	-.0009
30.000			.2378	-.2891	-.5900	-.5733	-.0757	.0216	-.0002	-.2120	-.3486	-.2178	-.0413	-.0243	-.0176
60.000			.2746	-.2433	-.5600	-.2933	-.0398	.0773	.0163	-.3767	-.5721	-.4062	-.0993	-.0037	.0078
90.000		.7749	.3158	-.1782	-.5154	-.1911	.0576	.2603	.3675		-.5555	-.7709	-.1662	-.0229	.0171
120.000			.4234	-.0969	-.4403	-.2523	.0044	.2022	.3305	-.0671	-.0876	-.2044	-.2134	-.1126	.0018
150.000								.1489		.1402		-.2369		-.1629	
180.000			.5043	-.0153	-.3745	-.2806	-.0316	.1238	.2333	.2729	-.1353	-.4229	-.3866	-.2340	-.0387
210.000				.0296	-.3254	-.2518	-.0571	.1028	.2176	.3386	.1894	-.3692	-.2730	-.1845	-.0246
240.000	1.0640	.9993	.5762	.0439	-.2948	-.2320	-.0353	.1129	.2127	.3374	.2912	-.3491	-.2559	-.2107	-.0339
270.000		.8515													.3464

K/LT .7480 .8530 .9280

PMI

.000	-.0098	-.0463	-.3120												
30.000	-.0093	-.0378	-.2971												
60.000	.0099	-.0042	-.1793												
90.000	.0350	.0007													
120.000	.0542	-.0821	.3004												
150.000	.0905	-.0146	.0535												
180.000	.0163	.0054	-.0290												
210.000	.0442	.0429	.1414												
240.000	.0442	.0537	.1011												

ALPHA( 3) = -6.180 BETA( 8) = 3.330

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2120	.2420	.2900	.3440	.3940	.4310	.5050	.5900	.6300
PMI															
.000	1.0570	.6731	.2332	-.2840	-.6035	-.6390	-.0590	-.0023	-.0149	-.1627	-.2493	-.1541	-.0322	-.0191	-.0121
30.000			.2212	-.3045	-.6023	-.5115	-.0706	.0336	.0099	-.1882	-.3307	-.2236	-.0446	-.0161	-.0106
60.000			.2332	-.2877	-.5896	-.2667	-.0500	.0984	.0343	-.3443	-.5321	-.4278	-.0661	-.0066	.0033
90.000		.7280	.2882	-.2280	-.5426	-.1880	.0694	.2717	.3735		-.5466	-.7799	-.1887	-.0102	.0186
120.000			.3761	-.1385	-.4780	-.2403	.0098	.2004	.3337	-.0353	-.1090	-.2203	-.2203	-.1153	-.0093
150.000								.1422		.1409		-.2777		-.1784	
180.000			.4709	-.0445	-.3961	-.2984	-.0809	.1144	.2333	.2630	-.2047	-.4993	-.3906	-.2288	-.0640
210.000				.0189	-.3362	-.2801	-.0621	.0957	.2152	.3275	.1759	-.3593	-.2623	-.1897	-.0432
240.000	1.0570	1.0310	.5726	.0493	-.2939	-.2559	-.0426	.1063	.2095	.3327	.2885	-.3333	-.2866	-.2387	-.0472
270.000		.6933													.3427

K/LT .7480 .8530 .9280

PMI

TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01731)

ARC11-716 1A14 21-712-S12M25-A710 EXTERNAL TANK

ALPHA( 3 ) = -6.190 BETA( 8 ) = 3.330

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .6330 .9290

PMI  
.000 -.0129 -.0482 -.3123  
30.000 -.0129 -.0405 -.3039  
60.000 .0032 -.0079 -.1844  
90.000 .0271 -.0054  
120.000 .0416 -.0682 .2333  
150.000 .3390 -.0015 .0231  
180.000 -.0030 -.0489 -.0567  
210.000 .0340 .0379 .1143  
240.000 .0377 .0578 .0812

ALPHA( 3 ) = -6.180 BETA( 8 ) = 5.010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2190 .2420 .2600 .3440 .3940 .4310 .5030 .5360  
PMI  
.000 1.0390 .6559 .2186 -.2909 -.6010 -.6531 -.1113 -.0211 -.0323 -.1735 -.2658 -.1366 -.0345 -.0295  
30.000 .1942 -.3284 -.6081 -.6037 -.6037 -.2074 -.0146 .0173 .0461 -.1780 -.3231 -.2023 -.0900 -.0221  
60.000 .1957 -.3209 -.6037 -.6037 -.6037 -.2074 -.0146 .0173 .0461 -.1780 -.3231 -.2023 -.0900 -.0221  
90.000 .6795 .2376 -.2698 -.5865 -.1580 .0734 .2583 .3783 .5474 .7184 .1527 -.0160 .0070  
120.000 .3224 -.1902 -.5166 -.2427 -.0040 .1692 .3274 -.0204 -.1367 -.2248 -.1149 -.0343  
150.000 .4285 -.0688 -.4281 -.3515 -.0136 .0960 .2194 .2374 .2374 .3306 .3195  
180.000 .0086 -.3452 -.3092 -.0795 .0743 .0986 .3031 .1561 .5737 .2657 .2172 .0849  
210.000 .9976 .5618 .3396 .3021 -.2675 -.0547 .0639 .1977 .3176 .2745 .3320 .3334 .0762  
240.000 1.0390 .9976 .5618 .3396 .3021 -.2675 -.0547 .0639 .1977 .3176 .2745 .3320 .3334 .0762  
270.000 .8308

K/LT .7460 .6330 .9290

PMI  
.000 -.0286 -.0546 -.3168  
30.000 -.0239 -.0908 -.3200  
60.000 .0032 -.0179 -.1974  
90.000 .0134 -.0129  
120.000 .0178 -.0578 .1976  
150.000 .3120 .0070 .0115  
180.000 .0828 .0640 .0786  
210.000 .0173 .0228 .1203  
240.000 .0143 .0401 .1116

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14 - VOL. 9

(RB1731)

ARC11-716 IAI14 0L+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 3) = -6.140 BETA( 10) = 6.740

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0050	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5590	.6380
PHI															
.000	1.0170	.6348	.2030	-.3088	-.6029	-.6611	-.1285	-.0360	-.0480	-.1796	-.2751	-.1533	-.0808	-.0319	-.0439
70.000			.1617	-.3400	-.6359	-.4078	-.0598	.0357	.0245	-.1567	-.3222	-.2035	-.0569	-.0875	-.0390
80.000			.1605	-.3423	-.6195	-.1989	-.0030	.1201	.0578	-.3053	-.5471	-.3855	-.0631	-.0086	-.0133
90.000		.6324	.1960	-.3083	-.5910	-.1466	.0688	.2525	.3869	-.5506	-.6585	-.1579	-.0153	-.0096	
120.000			.2777	-.2286	-.5455	-.2602	-.0035	.1866	.3309	-.0106	-.1567	-.2625	-.2177	-.1354	-.0662
135.000								.1131		.1258	-.3367	-.3567		-.2020	
150.000			.3869	-.1214	-.4642	-.4258	-.0882	.0798	.2114	.2186	-.3222	-.5689	-.3696	-.2533	-.1303
165.000				-.0316	-.3740	-.3435	-.0931	.0571	.1046	.2739	.1298	-.3755	-.2936	-.2449	-.1160
180.000	1.0170	.9294	.5509	.0306	-.3120	-.2880	-.0627	.0736	.1858	.2990	.2667	-.3143	-.3661	-.2590	-.1090
270.000		.9724						.3323							

X/LT .7460 .8530 .9280

PHI

.000	-.0332	-.0664	-.3174
30.000	-.0327	-.0542	-.3198
60.000	-.0103	-.0251	-.1946
90.000	.0003	-.0256	
120.000	.0018	-.0629	.1921
135.000	.0032	-.0165	-.0001
150.000	-.0629	-.0803	-.1070
165.000	-.0086	.0078	.0997
180.000	-.0212	.0115	.1098

ALPHA( 3) = -6.140 BETA( 11) = 8.900

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5590	.6380
PHI															
.000	.9823	.5972	.1866	-.3154	-.6271	-.6590	-.1523	-.0368	-.0696	-.1963	-.2801	-.1592	-.0940	-.0731	-.0603
30.000			.1333	-.3563	-.6579	-.3901	-.0511	.0448	.0319	-.1521	-.3250	-.2106	-.0611	-.0377	-.0475
60.000			.1235	-.3462	-.6464	-.1614	.0101	.1161	.0704	-.2848	-.5510	-.3393	-.0491	-.0126	-.0203
90.000		.5793	.1510	-.3470	-.6213	-.1323	.0582	.2456	.3911	-.5485	-.5485	-.1607	-.1250	-.0206	-.0201
120.000			.2318	-.2669	-.5773	-.2322	-.0109	.1769	.3232	-.0034	-.1739	-.2016	-.2278	-.1648	-.0898
135.000								.1009		.1178	-.3922	-.3922		-.2893	
150.000			.3453	-.1560	-.4835	-.4644	-.1061	.0595	.1983	.1896	-.3288	-.6182	-.3708	-.2754	-.1967
165.000				-.0332	-.3845	-.3742	-.1219	.0289	.1606	.2454	.1057	-.3790	-.3334	-.2766	-.1371
180.000	.9823	.9025	.5404	.0202	-.3134	-.3048	-.0858	.0509	.1537	.2817	.2490	-.4705	-.4078	-.3036	-.1981
270.000		.9991						.3283							

X/LT .7460 .8530 .9280

PHI

.000	-.0332	-.0664	-.3174
30.000	-.0327	-.0542	-.3198
60.000	-.0103	-.0251	-.1946
90.000	.0003	-.0256	
120.000	.0018	-.0629	.1921
135.000	.0032	-.0165	-.0001
150.000	-.0629	-.0803	-.1070
165.000	-.0086	.0078	.0997
180.000	-.0212	.0115	.1098

DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 CR+T12+512N23+AT10 EXTERNAL TANK

(RB1731)

ALPHA( 3 ) = -6.140 BETA( 1 ) = 6.900

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI	.000	.0533	.0838	.3198
30.000	-.0399	-.0609	-.3183	
60.000	-.0237	-.0435	-.1942	
90.000	-.0185	-.0485		
120.000	-.0217	-.0903	.1695	
135.000	-.0205	-.0249	-.0135	
150.000	-.0851	-.0908	-.1298	
165.000	-.0378	-.0098	.0844	
180.000	-.0634	-.0165	.1032	

ALPHA( 4 ) = -4.170 BETA( 1 ) = -9.980

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .5580 .6380

PHI	.000	.9790	.6302	.2263	-.2718	-.9949	-.6330	-.1790	-.0783	-.0867	-.2047	-.2710	-.1628	-.1131	-.0972	-.0927
30.000	.3653	-.1347	-.4702	-.4861	-.3091	-.1216	-.1541	-.4657	-.3676	-.1658	-.1258	-.1049	-.0785			
60.000	.5329	.0262	-.2968	-.2766	-.1260	-.0033	-.0573	-.7159	-.6118	-.2176	-.0126	.0206	.0116			
90.000	1.0520	.524	-.1650	-.1159	.0856	.2678	.3758	-.5830	-.5289	-.0758	-.0201	.0114	.0358			
120.000	.6920	.1843	-.1428	-.1150	.0493	.2087	.2623	-.2520	.0704	.0555	-.0128	-.0349				
135.000	.6356	.1294	-.2066	-.1998	-.0570	.1028	.1622	.3184	.2552	-.0737	-.2465	-.1601	-.0402			
150.000		.0418	-.2981	-.2844	-.1062	.0433	.1471	.3263	.3076	-.1136	-.2714	-.1908	-.0397			
165.000	.9790	.9248	.4727	-.0354	-.3631	-.3387	-.1181	.1513	.3054	.2640	-.3174	-.2443	-.0940			
180.000	.5533							.4433								

X/LT .7460 .8530 .9280

PHI	.000	-.0727	-.1023	-.3280
30.000	-.0717	-.0775	-.2887	
60.000	.0184	.0279	-.1298	
90.000	.0014	-.1247		
120.000	.1472	-.0297	.6584	
135.000	.1551	.1265	.3721	
150.000	.0969	.1799	.4292	
165.000	.0993	.1803	.5103	
180.000	.0573	.1281	.3145	

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(RB1T31)

ARC11-716 IA14 Q1+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 4) = -4.190 BETA( 2) = -7.970

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0250	.6753	.2528	-.2595	-.5850	-.6280	-.1354	-.0458	-.0565	-.1885	-.2645	-.1546	-.0923	-.0894	-.0645
30.000			.3613	-.1509	-.4931	-.5028	-.2146	-.0832	-.1113	-.4101	-.3481	-.1457	-.1098	-.0856	-.0583
60.000			.4932	-.0217	-.3432	-.2595	-.1265	.0172	-.0380	-.6891	-.5979	-.2444	-.0515	.0168	.0154
90.000		1.0160	.6072	.0878	-.2234	-.1528	.0718	.2630	.3803		-.5865	-.3936	-.0807	-.0199	.0164
120.000			.6453	.1296	-.1950	-.1538	.0367	.2045	.2687	-.2515	.0256	.0159	-.0595	-.0401	.0377
135.000								.1472		.1185		-.0169		-.0684	
150.000			.6178	.1008	-.2371	-.2222	-.0461	.1144	.1771	.3084	.2132	-.0531	-.2537	-.1635	-.0343
165.000				.0369	-.3070	-.2970	-.0859	.0662	.1673	.3329	.3122	-.1761	-.2776	-.1712	-.0192
180.000	1.0260	.9453	.4930	-.0243	-.3696	-.3259	-.0919	.0490	.1705	.3193	.2785	-.2589	-.3310	-.2215	-.0623
270.000		.6212							.4365						

X/LT .7460 .8530 .9280

PHI

.000	-.0499	-.0740	-.3142
30.000	-.0454	-.0516	-.2777
60.000	.0180	.0348	-.1201
90.000	.0291	-.0424	
120.000	.1329	-.0392	.6123
135.000	.1391	.1167	.3671
150.000	.0912	.1709	.3815
165.000	.0997	.1685	.5907
180.000	.0672	.1248	.3135

ALPHA( 4) = -4.210 BETA( 3) = -5.970

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0600	.7091	.2721	-.2500	-.5768	-.5862	-.0687	-.0206	-.0300	-.1786	-.2542	-.1496	-.0722	-.0414	-.0354
30.000			.3543	-.1682	-.5122	-.5327	-.1709	-.0478	-.0721	-.3633	-.3180	-.1521	-.0889	-.0709	-.0428
60.000			.4609	-.0610	-.4053	-.3278	-.0947	.0375	-.0124	-.6398	-.5886	-.2799	-.0642	.0053	.0184
90.000		.9753	.5558	.0315	-.2920	-.1859	.0823	.2642	.3853		-.5794	-.6607	-.1001	-.0186	.0211
120.000			.5979	.0812	-.2542	-.1871	.0262	.2039	.2773	-.2399	-.0132	-.0297	-.1056	-.0765	.0270
135.000								.1502		.1094		-.0617		-.1073	
150.000			.5920	.0758	-.2814	-.2337	-.0431	.1183	.1925	.3003	.1090	-.0477	-.2805	-.1848	-.0342
165.000			.0247	-.3246	-.2727	-.0724	.0810	.0810	.1812	.3400	.2860	-.2020	-.2850	-.1890	-.0130
180.000	1.0600	.9571	.5100	-.0209	-.5700	-.3009	-.0702	.0686	.1851	.3277	.2833	-.2382	-.3104	-.2184	-.0357
270.000		.6847							.4254						

X/LT .7460 .8530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+712+312N25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 4 ) = -4.210 BETA( 3 ) = -5.970

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0307 -.0559 -.3080  
 30.000 -.0223 -.0347 -.2702  
 60.000 .0204 .0334 -.1214  
 90.000 .0443 .0032  
 120.000 .1141 -.0447 -.5700  
 135.000 .1203 .1056 .3513  
 150.000 .0803 .1551 .3370  
 165.000 .0949 .1619 .4662  
 180.000 .0711 .1243 .2899

ALPHA( 4 ) = -4.190 BETA( 4 ) = -3.980

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.0770 .7244 .2824 -.2466 -.5622 -.6147 -.0804 -.0122 -.0149 -.1686 -.2334 -.1525 -.0365 -.0231 -.0179  
 30.000 .3358 -.1894 -.5214 -.5637 -.1303 -.0248 -.0434 -.3261 -.3031 -.1612 -.0695 -.0585 -.0350  
 60.000 .4194 -.1058 -.4521 -.3458 -.0835 .0536 .0061 -.5824 -.5730 -.3056 -.0667 -.0045 .0109  
 90.000 .9320 .9019 -.0281 -.3661 -.1969 .0381 .2631 .3892 -.5740 -.7409 -.1080 -.0231 .0178  
 120.000 .5530 .0267 -.3155 -.2050 .0229 .2009 .2831 -.2262 -.0510 -.0768 -.1358 -.0928 .0155  
 135.000 .5644 .0307 -.3209 -.2367 -.0419 .1015 .1015 .2875 .0009 -.0858 -.2981 -.1949 -.0454  
 150.000 .0137 -.3403 -.2605 -.0546 .0933 .1881 .3341 .2548 -.2537 -.2859 -.1974 -.0149  
 165.000 1.0770 .9997 .5152 -.0155 -.3649 -.2708 -.0599 .0931 .1884 .3292 .2822 -.2948 -.2781 -.2220 -.0404  
 180.000 .7294 .4125

X/LT .7460 .8530 .9280

PHI  
 .000 -.0194 -.0465 -.3084  
 30.000 -.0149 -.0278 -.2727  
 60.000 .0185 .0264 -.1358  
 90.000 .0464 .0182  
 120.000 .1001 -.0830 .3464  
 135.000 .1028 .0786 .3122  
 150.000 .0659 .1288 .2933  
 165.000 .0918 .1444 .3921  
 180.000 .0751 .1151 .2690

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TABULATED PRESSURE DATA - 1A14 - VOL. 9

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(RB1731)

ARC11-716 1A14 01-T12-S12N25+T110 EXTERNAL TANK

ALPHA( 4) = -4.180 BETA( 5) = -1.980

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0900	.7374	.2921	-.2374	-.5683	-.8204	-.0914	.0018	-.0034	-.1609	-.2167	-.1472	-.0483	-.0113	-.0044
30.000			.3220	-.2030	-.5337	-.5853	-.1042	.0004	-.0150	-.2793	-.2734	-.1779	-.0935	-.0397	-.0274
60.000			.3833	-.1459	-.4900	-.3359	-.0638	.0743	.0315	-.5313	-.5517	-.3442	-.0360	-.0081	.0085
90.000		.8675	.4459	-.0772	-.4289	-.1853	.0622	.2681	.3964	-.2059	-.5619	-.7597	-.1201	-.0200	.0186
120.000			.9013	-.0222	-.3724	-.2657	.0216	.2008	.2936	-.1021	-.0840	-.1214	-.1631	-.1146	.0116
135.000								.1502				-.1327		-.1511	
150.000			.5313	.0051	-.3582	-.2380	-.0417	.1232	.2074	.2768	-.0682	-.1784	-.3215	-.2242	-.0522
165.000				.0045	-.3641	-.2444	-.0588	.0987	.1985	.3322	.2248	-.3195	-.2950	-.2130	-.0108
180.000	1.0900	.9642	.5220	-.0116	-.3705	-.2498	-.0514	.0985	.1988	.3263	.2833	-.3187	-.2651	-.1837	-.0259
270.000		.7847						.4051							

K/LT .7460 .8530 .9280

PMI

.000	-.0039	-.0377	-.3029												
30.000	-.0086	-.0234	-.2735												
60.000	.0183	.0222	-.1482												
90.000	.0464	.0279													
120.000	.0859	-.0844	.4704												
135.000	.0877	.0806	.2356												
150.000	.0361	.0914	.1913												
165.000	.0767	.1173	.3733												
180.000	.0582	.0982	.2683												

ALPHA( 4) = -4.180 BETA( 6) = .030

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0900	.7399	.2902	-.2418	-.5693	-.8305	-.0841	.0089	-.0006	-.1579	-.2117	-.1495	-.0397	-.0063	-.0003
30.000			.3012	-.2316	-.5527	-.5974	-.0802	.0230	.0051	-.2357	-.2602	-.1903	-.0374	-.0258	-.0219
60.000			.3371	-.1902	-.5160	-.3185	-.0402	.0943	.0310	-.4730	-.5457	-.3827	-.0544	-.0056	.0096
90.000		.8360	.3917	-.1313	-.4708	-.1736	.0691	.2734	.4035	-.3490	-.7211	-.1164	-.0138	-.0212	.0212
120.000			.4514	-.0728	-.4256	-.2184	.0144	.1980	.3017	-.1735	-.1156	-.1619	-.1864	-.1101	.0045
135.000								.1466		.1082		-.1921		-.1547	
150.000			.5001	-.0251	-.3926	-.2437	-.0434	.1214	.2145	.2635	-.0745	-.3200	-.3418	-.2427	-.0808
165.000				-.0094	-.3611	-.2666	-.0560	.0977	.2027	.3249	.1949	-.3613	-.2975	-.2097	-.0241
180.000	1.0900	.9821	.5272	-.0060	-.3537	-.2409	-.0434	.1017	.2005	.3173	.2767	-.3394	-.2499	-.1983	-.0172
270.000		.8370						.3976							

K/LT .7460 .8530 .9280

PMI

DATE 08 JAN 79

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4513

ARC11-716 1A14 01-T12-S12N25+AT10 EXTERNAL TANK (R01731)

ALPHA( 4) = -4.180 BETA( 6) = .030

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0033	-.0318	-.3000
30.000	-.0103	-.0229	-.2801
60.000	.0139	.0130	-.1600
90.000	.0425	.0226	
120.000	.0715	-.0893	.3959
135.000	.0674	.0253	.2001
150.000	.0199	.0446	.1230
165.000	.0382	.0656	.1376
180.000	.0637	.0733	.0745

ALPHA( 4) = -4.170 BETA( 7) = 2.020

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0880	.7403	.2942	-.2355	-.5658	-.6127	-.0739	.0059	-.0040	-.1598	-.2190	-.1480	-.0464	-.0117	-.0006
30.000			.2895	-.2415	-.5729	-.6080	-.0716	.0346	.0261	-.2032	-.2701	-.1884	-.0406	-.0115	-.0136
60.000			.2986	-.2239	-.5553	-.3237	-.0205	.1111	.0753	-.4133	-.5221	-.3820	-.0467	-.0031	.0049
90.000		.7874	.3399	-.1804	-.5092	-.1777	.0785	.2786	.4143		-.5383	-.6636	-.1312	-.0055	.0177
120.000			.4008	-.1203	-.4617	-.2125	.0131	.1969	.3056	-.1424	-.1378	-.1969	-.2000	-.1113	-.0001
135.000							.1435	.1435	.1090			-.2405		-.1647	
150.000			.4627	-.0614	-.4172	-.2872	-.0487	.1146	.2174	.2487	-.1528	-.4266	-.3753	-.2370	-.0561
165.000				-.0248	-.3844	-.2646	-.0626	.0896	.2011	.3145	.1711	-.3591	-.2629	-.1707	-.0280
180.000	1.0860	.9583	.5242	-.0095	-.3687	-.2602	-.0455	.0923	.1920	.3123	.2793	-.3544	-.2521	-.2106	-.0325
270.000		.8864													.3940

X/LT .7460 .8530 .9280

PHI			
.000	-.0033	-.0336	-.3015
30.000	-.0098	-.0240	-.2878
60.000	.0122	.0082	-.1674
90.000	.0401	.0231	
120.000	.0594	-.0601	.3207
135.000	.0379	.0112	.0647
150.000	.0303	.0228	-.0275
165.000	.0373	.0603	.1487
180.000	.0598	.0753	.0895

ORIGINAL PAGE  
OF POOR QUALITY

(RB1731)

ARC11-716 IAI4 01+712+512N25+710 EXTERNAL TANK

ALPHA( 4 ) = -4.240 BETA( 8 ) = 4.040

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0700	.7171	.2788	-.2458	-.5631	-.6153	-.0949	-.0079	-.0152	-.1680	-.2264	-.1542	-.0590	-.0216	-.0199
30.000			.2532	-.2820	-.5890	-.3269	-.0660	.0412	.0352	-.1784	-.2717	-.2016	-.0443	-.0093	-.0154
60.000			.2480	-.2805	-.5777	-.2381	-.0069	.1239	.0980	-.3618	-.5138	-.3952	-.0438	-.0004	-.0058
90.000		.7306		.2815	-.2381	-.5413	-.2180	.0928	.4234		-.5226	-.6172	-.1399	-.0041	.0132
120.000			.3426	-.1720	-.5102	-.3057	.0163	.1983	.3134	-.1075	-.1604	-.2302	-.2107	-.1107	-.0108
135.000								.1390		.1079		-.2935		-.1830	
150.000			.4179	-.1046	-.4483	-.3854	-.0594	.1084	.2148	.2357	-.2328	-.5168	-.3964	-.2277	-.0669
165.000				-.0461	-.4004	-.3265	-.0742	.0795	.1929	.3032	.1547	-.3585	-.2536	-.1985	-.0345
180.000	1.0700	.9608	.5166	-.0093	-.3619	-.2927	-.0601	.0797	.1877	.3074	.2710	-.3418	-.2942	-.2459	-.0553
270.000		.9326						.3849							

X/LT .7460 .8530 .9280

## PMI

.000	-.0184	-.0446	-.3018
30.000	-.0120	-.0321	-.3016
60.000	.0028	-.0015	-.1822
90.000	.0341	.0158	
120.000	.0481	-.0321	.2592
135.000	.0397	.0210	.0407
150.000	-.0185	-.0235	-.0295
165.000	.0442	.0587	.1393
180.000	.0462	.0733	.1119

ALPHA( 4 ) = -4.230 BETA( 9 ) = 6.050

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0430	.6950	.2653	-.2553	-.5748	-.6289	-.1238	-.0277	-.0361	-.1861	-.2478	-.1566	-.0750	-.0437	-.0373
30.000			.2140	-.3033	-.6139	-.5365	-.0673	.0440	.0409	-.1667	-.2809	-.1941	-.0538	-.0218	-.0213
60.000			.2051	-.3184	-.6041	-.2003	-.0025	.1297	.1202	-.3316	-.5289	-.3808	-.0366	-.0104	-.0124
90.000		.6689	.2273	-.2855	-.5799	-.1272	.0887	.2762	.4315		-.5251	-.5449	-.1047	-.0132	-.0085
120.000			.2848	-.2222	-.5398	-.2218	.0118	.1925	.3066	-.0807	-.1912	-.2480	-.2124	-.1237	-.0422
135.000								.1296		.1049		-.3228		-.1848	
150.000			.3704	-.1451	-.4836	-.3850	-.0718	.0948	.2060	.2139	-.3145	-.5414	-.3733	-.2493	-.1028
165.000				-.0772	-.4180	-.3853	-.0933	.0599	.1757	.2692	.1275	-.3705	-.2740	-.2361	-.0884
180.000	1.0430	.9117	.9013	-.0280	-.3591	-.3442	-.0765	.0617	.1639	.2874	.2578	-.3406	-.3476	-.2375	-.0969
270.000		.9807						.3751							

X/LT .7460 .8530 .9280

## PMI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4817

ARC11-716 1A14 CR+T12+S12N25+AT10 EXTERNAL TANK

(RB1731)

ALPHA( 4) = -4.230 BETA( 9) = 5.050

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8530 .9280

PMI			
.000	-.0356	-.0560	-.3074
30.000	-.0225	-.0433	-.3069
60.000	-.0072	-.0146	-.1851
90.000	.0107	.0042	
120.000	.0216	-.0225	.2121
135.000	.0191	.0178	.0289
150.000	-.0368	-.0433	-.0587
165.000	.0131	.0405	.1335
180.000	.0084	.0531	.1273

ALPHA( 4) = -4.200 BETA( 10) = 8.070

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0140	.6657	.2446	-.2636	-.5841	-.6315	-.1427	-.0494	-.0560	-.1947	-.2603	-.1540	-.0916	-.0879	-.0616
30.000			.1795	-.3214	-.6266	-.5028	-.0609	.0465	.0485	-.1507	-.3038	-.1941	-.0582	-.0350	-.0371
60.000			.1604	-.3444	-.6210	-.1803	.0070	.1359	.1301	-.3081	-.5330	-.3286	-.0370	-.0170	-.0255
90.000		.6183	.1755	-.3234	-.613.	-.1234	.0832	.2633	.4422		-.5273	-.4498	-.0726	-.0218	-.0417
120.000			.2366	-.2724	-.5760	-.1969	.0149	.1866	.3024	-.0615	-.2133	-.2625	-.2147	-.1457	-.0746
135.000								.1222		.1019		-.3550		-.2106	
150.000			.3275	-.1861	-.5126	-.4699	-.0791	.0779	.2018	.1939	-.3416	-.5856	-.3577	-.2638	-.1383
165.000				-.0975	-.4291	-.4259	-.1078	.0325	.1582	.2479	.0978	-.3712	-.3052	-.2611	-.1217
180.000	1.0140	.6548	.4896	-.0328	-.3702	-.3671	-.0890	.0419	.1467	.2713	.2427	-.3580	-.3796	-.2866	-.1380
270.000		1.0190							.3754						

X/LT .7460 .8530 .9280

PMI			
.000	-.0486	-.0692	-.3155
30.000	-.0269	-.0441	-.3001
60.000	-.0180	-.0287	-.1701
90.000	-.0156	-.0178	
120.000	-.0018	-.0486	.1921
135.000	-.0023	.0079	.0216
150.000	-.0590	-.0585	-.0843
165.000	-.0111	.0191	.1164
180.000	-.0319	.0137	.1229

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1731)

ARC11-716 IA14 OL+T12+S12M25+AT10 EXTERNAL TANK

ALMAAO( 4) = -4.200 BETA0 (11) = 10.080

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9783	.6234	.2175	-.2826	-.5977	-.6374	-.1981	-.0789	-.0679	-.2142	-.2683	-.1713	-.1191	-.1013	-.0891
30.000			.1372	-.3637	-.6458	-.5787	-.0848	.0337	.0459	-.1466	-.3070	-.1903	-.0740	-.0578	-.0572
60.000			.1151	-.3647	-.6568	-.1569	.0112	.1291	.1285	-.3005	-.5406	-.3118	-.0427	-.0361	-.0430
90.000		.5578	.1265	-.3704	-.6106	-.0987	.0625	.2598	.4551	-.5411	-.3952	-.0539	-.0400	-.0792	
120.000			.1843	-.3174	-.6133	-.1913	.0132	.1786	.2954	-.0635	-.2383	-.2944	-.2165	-.1788	-.1140
135.000								.1103		.0917		-.4042		-.2439	
150.000			.2794	-.2268	-.5820	-.5560	-.0974	.0614	.1852	.1325	-.3350	-.6348	-.3865	-.2929	-.1574
165.000				-.1245	-.4569	-.4878	-.1367	.0083	.1305	.2046	.0767	-.3815	-.3679	-.3180	-.1562
180.000	.9783	.7954		-.0453	-.3772	-.3903	-.1100	.0231	.1104	.2406	.2200	-.5882	-.4967	-.3425	-.1858
270.000		1.0580							.3668						
X/LT	.7480	.8530	.9280												

ALMAAO( 5) = -2.870 BETA0 ( 1) = -9.990

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9915	.6668	.2632	-.2436	-.5746	-.6138	-.1693	-.0812	-.0873	-.2054	-.2684	-.1515	-.1103	-.1078	-.1013
30.000			.4068	-.1010	-.4358	-.4623	-.2772	-.1064	-.1322	-.4391	-.3285	-.1490	-.1153	-.1021	-.0798
60.000			.5627	.0492	-.2784	-.2569	-.0926	.0312	.0110	-.7181	-.5523	-.1577	-.0150	.0181	.0115
90.000		1.0640	.6668	.1542	-.1651	-.1139	.0902	.2751	.3925	-.5694	-.5531	-.0861	-.0267	-.0267	.0103
120.000			.6740	.1596	-.1622	-.1398	.0329	.1663	.2313	-.3240	.0227	.0676	-.0032	-.0077	.0560
135.000								.1168		.0978		.0182		-.0329	
150.000			.8015	.0918	-.2410	-.2370	-.0856	.0785	.1301	.2979	.2448	-.0931	-.2358	-.1492	-.0333
165.000				-.0014	-.3320	-.3433	-.1216	.0248	.1241	.3092	.2929	-.1086	-.2530	-.1807	-.0234
180.000	.9915	.8929	.4335	-.0740	-.3967	-.3972	-.1240	.0139	.1377	.2929	.2547	-.5959	-.3031	-.2259	-.0799
270.000		.5641							.4702						
X/LT	.7480	.8530	.9280												

PHI



DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4510

(R81731)

ARC11-716 IAI4 Q1-T12-S12N25-AT10 EXTERNAL TANK

ALPHA( 5) = -2.870 BETA( 1) = -9.990

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

M/LT .7480 .8530 .9280

PMI

.000	-.0774	-.1021	-.3321
30.000	-.0680	-.0714	-.2942
60.000	.0249	.0464	-.1302
90.000	.0180	-.0886	
120.000	.1594	.0023	.6893
135.000	.1633	.1455	.3617
150.000	.1111	.1968	.4288
165.000	.1135	.1974	.5204
180.000	.0742	.1441	.3250

ALPHA( 5) = -2.890 BETA( 2) = -7.990

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

M/LT .0300 .0060 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5980 .6380

PMI

.000	1.0360	.7128	.2905	-.2277	-.5664	-.3993	-.1409	-.0437	-.0507	-.2002	-.2638	-.1278	-.0809	-.0738	-.0720
30.000			.4000	-.1157	-.4685	-.4805	-.2056	-.0638	-.0866	-.3952	-.3145	-.1385	-.1010	-.0890	-.0986
60.000			.5254	.0024	-.3373	-.2837	-.0875	.0499	.0110	-.6925	-.5374	-.2030	-.0455	.0133	.0145
90.000		1.0240	.6115	.0920	-.2362	-.4373	.0760	.2725	.3978		-.5719	-.6293	-.0997	-.0215	.0173
120.000			.6269	.1116	-.2230	-.1774	.0210	.1844	.2390	-.3197	-.0286	.0207	-.0328	-.0427	.0360
135.000								.1239		.0855		-.0212		-.0713	
150.000			.5832	.0643	-.2764	-.2563	-.0655	.0920	.1498	.2861	.1993	-.0657	-.2414	-.1637	-.0265
165.000				-.0036	-.3473	-.3434	-.1029	.0484	.1463	.3140	.2994	-.1664	-.2394	-.1736	-.0100
180.000	1.0380	.9152	.4563	-.0657	-.4027	-.3806	-.1041	.0323	.1574	.3044	.2708	-.2357	-.3077	-.2099	-.0487
270.000		.6326													

M/LT .7480 .8530 .9280

PMI

.000	-.0565	-.0731	-.3127
30.000	-.0379	-.0467	-.2618
60.000	.0211	.0460	-.1232
90.000	.0350	-.0227	
120.000	.1364	-.0017	.6209
135.000	.1461	.1375	.3715
150.000	.1014	.1650	.3787
165.000	.1128	.1633	.5014
180.000	.0804	.1402	.3166

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ARC11-716 1A14 01+712+512+25+AT10 EXTERNAL TA K

(R81731)

ALMAC( 5) = -2.870 BETA0 ( 3) = -5.970

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0000	.7426	.3066	-.2166	-.5996	-.6132	-.1003	-.0233	-.0270	-.1813	-.2679	-.1133	-.0829	-.0440	-.0304
30.000		.3924	-.1325	-.4901	-.4939	-.1655	-.0340	-.0532	-.3532	-.3533	-.3033	-.1365	-.0790	-.0688	-.0384
60.000		.6870	-.0386	-.3893	-.3013	-.0828	.0632	.0328	.0328	-.6514	-.5300	-.2410	-.0334	.0059	.0134
90.000		.9869	.5571	.0370	-.3012	-.1780	.0672	.2710	.2036		-.5672	-.6733	-.1024	-.0226	.0142
120.000			.5813	.0284	-.2800	-.1347	.0138	.1870	.2455	-.2964	-.0643	-.0214	-.0825	-.0737	.0265
150.000				.5557	.0289	-.3142	-.2655	.1015	.1643	-.0787	-.0591			-.1028	
180.000					-.0165	-.3672	-.3074	-.0851	.1034	.3201	.2777	-.1968	-.2522	-.1789	-.0280
210.000	1.0690	.9225	.4693	-.3613	-.4175	-.3072	-.0791	.0617	.1685	.3120	.2740	-.2707	-.2806	-.2043	-.0193
270.000		.6879						.4472							
X/LT	.7460	.6330	.9280												

PMI

.000	-.0349	-.0327	-.2976												
30.000	-.0166	-.0295	-.2721												
60.000	.0256	.0404	-.1246												
90.000	.0446	.0102													
120.000	.1216	-.0065	.5721												
150.000	.1277	.1245	.3564												
180.000	.0912	.1671	.3465												
210.000	.1069	.1751	.4659												
270.000	.0856	.1405	.2923												

ALMAC( 5) = -2.860 BETA0 ( 4) = -3.980

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0890	.7625	.3234	-.2079	-.5408	-.5889	-.0707	-.0024	-.0051	-.1679	-.2485	-.1148	-.0472	-.0251	-.0199
30.000		.3750	-.1516	-.4976	-.5541	-.1240	-.0046	-.0046	-.0194	-.3069	-.2800	-.1446	-.0355	-.0558	-.0337
60.000		.4432	-.0825	-.4341	-.2999	-.0680	.0639	.0348	.0348	-.5273	-.5355	-.2765	-.0391	-.0022	.0116
90.000		.9403	.5072	-.0170	-.3811	-.1828	.0673	.2753	.4128		-.5653	-.6782	-.1114	-.0223	.0190
120.000			.5363	.0129	-.3511	-.2076	.0171	.1918	.2577	-.2748	-.0997	-.0692	-.1166	-.1058	.0182
150.000				.5341	.0102	-.3562	-.2627	.1131	.1394	.0760		-.1013		-.1261	
180.000					-.0229	-.3794	-.3026	-.0697	.1131	.2679	.0046	-.0814	-.2743	-.2009	-.0383
210.000	1.0890	.9285	.4807	-.0496	-.4092	-.2712	-.0636	.0848	.1725	.3208	.2486	-.2332	-.2607	-.1989	-.0049
270.000		.7438						.4364	.1791	.3134	.2741	-.3084	-.2497	-.2113	-.0292
X/LT	.7460	.6330	.9280												

PMI



DATE 06 JAN 79 TABULATED PRESSURE DATA - IA' A - VOL. 9

ARC11-7:5 1A14 0A+T12+S12N25+AT10 EXTERNAL TANK (R01131)

ALPHA( 5) = -2.000 BETAD ( 4) = -3.900

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .0330 .9200

PHI  
 .000 -0.143 -0.0384 -0.2624  
 30.000 -0.064 -0.0161 -0.2596  
 60.000 .0236 .0360 -0.1314  
 90.000 .0528 .0293  
 120.000 .1096 -0.0461 .3504  
 150.000 .1113 .1027 .3190  
 180.000 .0782 .1446 .3012  
 165.000 .1044 .1640 .3966  
 180.000 .0905 .1359 .2793

ALPHA( 5) = -2.840 BETAD ( 5) = -1.990

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0280 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380  
 PHI  
 .000 1.1010 .7742 .3286 -.2042 -.5415 -.5933 -.0913 .0057 .0026 -.1586 -.2074 -.1253 -.0437 -.3167 -.0102  
 30.000 .3603 -.1737 -.5101 -.5623 -.0918 .0153 .0033 -.2647 -.2548 -.1517 -.0561 -.0312 -.0280  
 60.000 .4047 -.1266 -.4721 -.2873 -.0487 .0975 .0720 -.5386 -.5964 -.3073 -.0194 .0063 .0061  
 90.000 .6949 .4495 -.0753 -.4251 -.1612 .0709 .2778 .4195 -.5635 -.5619 -.1057 -.0232 .0156  
 120.000 .4657 -.0384 -.4013 -.2288 .0180 .1902 .2661 -.2512 -.1233 -.1148 -.1476 -.1078 .0090  
 150.000 .3000 -.0295 -.3895 -.2427 -.0477 .1149 .1891 .2569 -.0802 -.1747 -.3014 -.2330 -.0315  
 165.000 -.0344 -.3934 -.2657 -.0650 .0865 .1640 .3129 .2169 .3098 -.2757 -.2097 -.0090  
 180.000 1.1010 .9291 .4800 -.0471 -.4052 -.2751 -.0549 .0673 .1859 .3092 .2725 .3360 -.2901 -.1868 -.0221  
 270.000 .7961

K/LT .7400 .0330 .9200

PHI  
 .000 -0.0060 -0.0295 -.2806  
 30.000 -0.0075 -.0130 -.2588  
 60.000 .0206 .0273 -.1429  
 90.000 .0495 .0362  
 120.000 .0927 -.0410 .4693  
 150.000 .0939 .0798 .2337  
 180.000 .0437 .1041 .1968  
 165.000 .0667 .1309 .3693  
 180.000 .0699 .1064 .2431

ORIGINAL PAGE IS  
 OF POOR QUALITY

ARC11-716 1A14 04+712+512N25+AT1D EXTERNAL TANK (R01731)

ALPHA ( S ) = -2.040 BETA ( S ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/L/T	.0050	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI															
.000	1.1020	.7756	.3285	-.2002	-.5490	-.6032	-.0835	.0112	.0365	-.1490	-.1996	-.1316	-.0440	-.0130	.0003
30.000			.3347	-.2000	-.5390	-.5922	-.0781	.0317	.0233	-.2255	-.2426	-.1630	-.0537	-.0343	-.0206
60.000			.3596	-.1670	-.4957	-.3140	-.0285	.1119	.0914	-.5330	-.5420	-.3135	-.0217	.0013	.0033
90.000		.8462	.3968	-.1291	-.4639	-.1789	.0786	.2836	.4233		-.5713	-.5131	-.1070	-.0179	.0042
120.000			.4388	-.0880	-.4314	-.2888	.0199	.1945	.2824	-.2183	-.1474	-.1481	-.1607	-.0071	.0071
135.000								.1415	.0839			-.1917		-.1546	
150.000			.4708	-.0551	-.4111	-.2658	-.0441	.1161	.1999	.2466	-.0817	-.3105	-.3107	-.2339	-.0700
165.000				-.0430	-.4047	-.3159	-.0574	.0911	.1889	.3099	.1852	-.3499	-.2753	-.1921	-.0197
180.000	1.1020	.9312	.4905	-.0457	-.3979	-.3049	-.0468	.0953	.1864	.3050	.2706	-.3526	-.2312	-.1844	-.0057
270.000		.8494													.4227

K/L/T .7460 .8330 .9280

PHI

.000	-.0005	-.0228	-.2623
30.000	-.0057	-.0127	-.2581
60.000	.0180	.0229	-.1472
90.000	.0441	.0404	
120.000	.0761	-.0474	.4078
135.000	.0779	.0390	.1445
150.000	.0320	.0560	.1343
165.000	.0671	.0812	.1385
180.000	.0726	.0849	.0723

ALPHA ( S ) = -2.040 BETA ( S ) = 2.040

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/L/T	.0050	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI															
.000	1.0930	.7710	.3261	-.2036	-.5455	-.5795	-.0690	.0729	.0010	-.1577	-.2163	-.1292	-.0444	-.0195	-.0107
30.000			.3130	-.2110	-.5568	-.5900	-.0724	.0376	.0355	-.2064	-.2618	-.1808	-.0509	-.0377	-.0216
60.000			.3132	-.2091	-.5431	-.2866	-.0126	.1229	.1144	-.5167	-.5566	-.3150	-.0360	-.0064	.0016
90.000		.7949	.3432	-.1808	-.5004	-.2165	.0867	.2903	.4335		-.5809	-.2263	-.0547	-.0361	-.0302
120.000			.3843	-.1365	-.4747	-.2082	.0164	.1943	.2888	-.1970	-.1663	-.1811	-.1498	-.1116	.0017
135.000								.1388	.0818			-.2313		-.1574	
150.000			.4322	-.0902	-.4427	-.2942	-.0484	.1122	.2028	.2309	-.1464	-.4183	-.3489	-.2354	-.0351
165.000				-.0622	-.4185	-.3145	-.0643	.0839	.1856	.3002	.1611	-.3474	-.2303	-.1636	-.0212
180.000	1.0930	.9240	.4858	-.0903	-.3970	-.2981	-.0546	.0826	.1753	.2960	.2675	-.3695	-.2325	-.1950	-.0239
270.000		.8932													.4117

K/L/T .7460 .8330 .9280

PHI

.000	-.0005	-.0228	-.2623
30.000	-.0057	-.0127	-.2581
60.000	.0180	.0229	-.1472
90.000	.0441	.0404	
120.000	.0761	-.0474	.4078
135.000	.0779	.0390	.1445
150.000	.0320	.0560	.1343
165.000	.0671	.0812	.1385
180.000	.0726	.0849	.0723



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4323

ARC11-716 1A14 01+712+S12+03+AT10 EXTERNAL TANK

(MB1731)

ALPHA(D) (S) = -2.000 BETA(D) (T) = 2.040

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

K/LT .7460 .0330 .9280

PMT

.000 -.0050 -.0264 -.2027  
 30.000 -.0033 -.0173 -.2653  
 60.000 .0172 .0173 -.1434  
 90.000 .0334 .0326  
 120.000 .0997 -.0280 .3131  
 150.000 .0632 .0215 .0740  
 180.000 .0418 .0430 -.0170  
 190.000 .0628 .0760 .1573  
 190.000 .0600 .0881 .0977

ALPHA(D) (S) = -2.000 BETA(D) (T) = 4.050

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5500 .6300

PMT

.000 1.0030 .7531 .3145 -.2120 -.5402 -.6043 -.0920 -.0068 -.0101 -.1714 -.2307 -.1286 -.0801 -.0281 -.0219  
 30.000 .2732 -.2549 -.5767 -.6041 -.0626 .0441 .0467 .1890 .3208 .1458 .0315 -.0302 -.0278  
 60.000 .2631 -.2667 -.5811 -.2600 .0006 .1338 .1333 .4960 .5695 .3091 .0449 .0168 .0098  
 90.000 .7349 .2837 -.2348 .5321 -.2739 .1039 .2989 .4456 .6073 .2929 .0195 .0603 .0518  
 120.000 .3334 -.1870 .5150 .2891 .0239 .1980 .2997 .1671 .1773 .1870 .1620 .1064 .0143  
 150.000 .3918 .1128 .4782 .3945 .0530 .1069 .2040 .2156 .2407 .4915 .3662 .2229 .0655  
 160.000 .0003 .4364 .4038 .0763 .0725 .1805 .2878 .1445 .3462 .2340 .1951 .0477  
 180.000 .4835 .0516 .4063 .3603 .0674 .0724 .2888 .2615 .3547 .2691 .2272 .0427  
 190.000 .9473  
 190.000 .7460 .0330 .9280

PMT

.000 -.0102 -.0394 -.2881  
 30.000 -.0099 -.0283 -.2811  
 60.000 .0126 .0099 .1336  
 90.000 .0082 .0193  
 120.000 .0978 .0176 .2355  
 150.000 .0486 .0909 .0421  
 180.000 .0124 .0117 .0360  
 180.000 .0334 .0886 .1403  
 180.000 .0564 .0678 .1213

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OF POOR QUALITY

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1731)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 5) = -2.870 BETA( 9) = 6.060

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0560	.7308	.2997	-.2204	-.5559	-.6097	-.1289	-.0296	-.5348	-.1874	-.2619	-.1255	-.0675	-.0472	-.0434
30.000			.2384	-.2828	-.5943	-.6028	-.0621	.0438	.0481	-.1829	-.2989	-.1247	-.0345	-.0506	-.0375
60.000			.2152	-.3089	-.6080	-.2115	.0031	.1357	.1468	-.4995	-.5437	-.2647	-.0570	-.0291	-.0194
90.000		.6766	.2285	-.2851	-.5476	-.1287	.1017	.2962	.4515	-.0164	-.0479	-.0096	-.1127	-.1235	
120.000			.2718	-.2330	-.5500	-.1874	.0207	.1934	.2872	-.1532	-.1998	-.1834	-.1524	-.1210	-.0442
135.000								.1305		.0777	-.2759			-.1793	
150.000			.3461	-.1703	-.5057	-.3781	-.0636	.0959	.1993	.1966	-.3248	-.5029	-.3304	-.2406	-.1022
165.000				-.1128	-.4509	-.4080	-.0926	.0573	.1532	.2564	.1154	-.3479	-.2573	-.2184	-.0899
180.000	1.0360	.8863	.4645	-.0680	-.4059	-.3714	-.0812	.0548	.1464	.2712	.2468	-.3634	-.3202	-.2423	-.0776
270.000		.9934													
X/LT	.7460	.8530	.9280												

X/LT .7460 .8530 .9280

PHI

.000	-.0336	-.0552	-.2997
30.000	-.0281	-.0353	-.2835
60.000	-.0014	-.0045	-.1297
90.000	-.0308	-.0124	
120.000	.0206	-.0154	.1796
135.000	.0263	.0268	.0203
150.000	-.0305	-.0246	-.0632
165.000	.0273	.0570	.1407
180.000	.0211	.0652	.1394

ALPHA( 5) = -2.870 BETA( 10) = 8.070

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0230	.6977	.2771	-.2383	-.5697	-.6140	-.1504	-.0537	-.0559	-.2061	-.2741	-.1342	-.0855	-.0790	-.0721
30.000			.2013	-.3099	-.6169	-.6595	-.0594	.0441	.0528	-.1675	-.3180	-.1235	-.0631	-.0593	-.0528
60.000			.1762	-.3379	-.6213	-.1908	.0083	.1385	.1585	-.4481	-.5435	-.2537	-.0728	-.0314	-.0287
90.000		.6236	.1797	-.3260	-.6213	-.1071	.0950	.2800	.4625	-.6018	-.0755	-.0263	-.1342	-.1523	
120.000			.2247	-.2861	-.5836	-.1901	.0236	.1866	.2839	-.1306	-.2345	-.1998	-.1641	-.1498	-.0838
135.000								.1246		.0770	-.3083			-.2064	
150.000			.3047	-.2113	-.5396	-.4527	-.0713	.0841	.1959	.1823	-.3681	-.5550	-.3345	-.2719	-.1280
165.000				-.1335	-.4691	-.4769	-.1075	.0335	.1476	.2358	.0837	-.3507	-.2864	-.2499	-.1022
180.000	1.0250	.8141	.4528	-.0721	-.4069	-.4204	-.0966	.0305	.1261	.2563	.2297	-.3462	-.3674	-.2744	-.1168
270.000		1.0300													
X/LT	.7460	.8530	.9280												

PHI

.000	-.0336	-.0552	-.2997
30.000	-.0281	-.0353	-.2835
60.000	-.0014	-.0045	-.1297
90.000	-.0308	-.0124	
120.000	.0206	-.0154	.1796
135.000	.0263	.0268	.0203
150.000	-.0305	-.0246	-.0632
165.000	.0273	.0570	.1407
180.000	.0211	.0652	.1394



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4325

ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK

(RB1731)

ALPHA( 5) = -2.870 BETA( 10) = 3.070

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8330	.9280
PMI			
.000	-.0990	-.0745	-.3143
30.000	-.0327	-.0419	-.2852
60.000	-.0162	-.0193	-.1327
90.000	-.0719	-.0456	
120.000	-.0006	-.0240	.1669
135.000	.0085	.0210	.0369
150.000	-.0495	-.0396	-.0959
165.000	.0024	.0326	.1232
180.000	-.0178	.0294	.1392

ALPHA( 5) = -2.830 BETA( 11) = 10.090

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5900	.6380
PMI															
.000	.9085	.6377	.2495	-.2565	-.5794	-.6283	-.1941	-.0851	-.0926	-.2004	-.2834	-.1547	-.1163	-.1094	-.1011
30.000			.1605	-.3492	-.6367	-.6224	-.0898	.0319	.0407	-.1617	-.3434	-.1258	-.0749	-.0669	-.0636
60.000			.1279	-.3576	-.6453	-.1709	.0253	.1463	.1511	-.4462	-.5409	-.2204	-.0864	-.0784	-.0461
90.000		.5697	.1246	-.3646	-.6149	-.1000	.0805	.2511	.4733	-.5743	-.0246	-.0496	-.1972	-.1793	
120.000			.1719	-.3286	-.6163	-.1672	.0221	.1716	.2694	-.1233	-.2672	-.2211	-.2000	-.1836	-.1175
135.000								.1130		.0632		-.3533		-.2288	
150.000			.2531	-.2513	-.5644	-.4587	-.0629	.0627	.1860	.1544	-.3539	-.5994	-.3656	-.2877	-.1494
165.000				-.1632	-.4848	-.4989	-.1272	.0011	.1218	.1950	.0529	-.3523	-.3376	-.2978	-.1456
180.000	.9085	.7826	.4364	-.0847	-.4135	-.4346	-.1141	.0376	.0941	.2210	.2014	-.5445	-.4722	-.3274	-.1789
270.000		1.0670						.3807							

X/LT .7460 .8330 .9280

PMI			
.000	-.0837	-.1086	-.3391
30.000	-.0395	-.0574	-.3002
60.000	-.0348	-.0409	-.1469
90.000	-.1195	-.0829	
120.000	-.0162	-.0385	.1496
135.000	-.0120	.0067	-.0067
150.000	-.0540	-.0547	-.1226
165.000	-.0285	.0104	.1117
180.000	-.0602	.0000	.1161

ORIGINAL SOURCE  
OF POOR QUALITY

(RB1731)

ARC11-716 IA14 OI+712+512N25+AT10 EXTERNAL TANK

ALPHA( 0) = -.090 BETA( 1) = -10.000

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
FHI															
.000	.9936	.7122	.3134	-.1959	-.5404	-.5718	-.2184	-.0817	-.0825	-.1857	-.2600	-.1577	-.1251	-.1161	-.1049
30.000			.4725	-.0399	-.3901	-.4140	-.2514	-.0785	-.0958	-.3968	-.2491	-.1525	-.1052	-.0842	-.0689
60.000			.6145	.0949	-.2420	-.2194	-.0673	.0767	.0575	-.6611	-.4487	-.0959	.0288	.0037	.0033
90.000		1.0780	.6846	.1645	-.1591	-.1123	.0964	.2840	.4117	-.5805	-.4154	-.1350	-.0644	-.0236	
120.000			.6455	.1330	-.1967	-.1717	-.0018	.1512	.1717	-.4269	-.0747	.0936	.0187	-.0048	.0635
135.000								.0787		.0451		.0359		-.0283	
150.000			.5481	.0321	-.2995	-.2888	-.1394	.0383	.0764	.2596	.2160	-.0810	-.2177	-.1426	-.0224
165.000				-.0633	-.3355	-.4062	-.1426	-.0056	.0877	.2861	.2787	-.0939	-.2296	-.1847	-.0182
180.000	.9936	.8479	.3750	-.1368	-.4579	-.4646	-.1324	-.0044	.1165	.2780	.2460	-.3883	-.2684	-.2230	-.0756
270.000		.5650							.4993						

X/LT .7460 .8530 .9280

FHI

.000	-.0838	-.1076	-.3340												
30.000	-.0570	-.0588	-.2969												
60.000	.0219	.0468	-.1326												
90.000	.0012	-.1243													
120.000	.1746	.0501	.6900												
135.000	.1835	.1774	.3933												
150.000	.1310	.2197	.4468												
165.000	.1333	.2204	.5366												
180.000	.0914	.1677	.3369												

ALPHA( 0) = -.680 BETA( 2) = -7.980

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
FHI															
.000	1.0460	.7654	.3462	-.1746	-.5261	-.5729	-.1583	-.0442	-.0433	-.1720	-.2464	-.1282	-.0914	-.0817	-.0715
30.000			.4646	-.0562	-.4190	-.4297	-.1927	-.0403	-.0532	-.3535	-.2404	-.1342	-.0956	-.0747	-.0454
60.000			.5741	.0467	-.2901	-.2477	-.0638	.0907	.0787	-.6336	-.4570	-.1282	.0382	.0030	.0007
90.000		1.0430	.6278	.1023	-.2295	-.1490	.0863	.2821	.4175	-.6078	-.3244	-.1158	-.0713	-.0191	
120.000			.6030	.0802	-.2613	-.2027	.0017	.1546	.1854	-.4158	-.1310	.0524	-.0174	-.0338	.0414
135.000								.0930		.0263		-.0173		-.0626	
150.000			.5344	.0126	-.3429	-.3080	-.0860	.0609	.1016	.2507	.2149	-.0968	-.2217	-.1564	-.0167
165.000				-.0673	-.4161	-.4114	-.1137	.0257	.1149	.2904	.2769	-.1446	-.2016	-.1695	-.0002
180.000	1.0460	.8646	.3577	-.1231	-.4606	-.4710	-.1100	.0237	.1408	.2880	.2602	-.2442	-.2859	-.2055	-.0349
270.000		.6340							.4896						

X/LT .7460 .8530 .9280

FHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1731)

ARC11-716 1A14 CR+T12+S12M25+AT10 EXTERNAL TANK

ALPHA( 6 ) = -.680 BETA( 2 ) = -7.980

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT .7460 .8530 .9280

PHI

.000	-.0340	-.0664	-.2948
30.000	-.0275	-.0262	-.2603
60.000	.0229	.0440	-.1246
90.000	.0141	-.0664	
120.000	.1554	.0339	.6638
135.000	.1655	.1663	.3922
150.000	.1218	.2098	.4162
165.000	.1359	.2117	.5216
180.000	.1001	.1685	.3305

ALPHA( 6 ) = -.670 BETA( 3 ) = -5.980

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.0750	.8002	.3641	-.1649	-.5176	-.5326	-.0962	-.0222	-.0201	-.1657	-.2245	-.1110	-.0685	-.0543	-.0439
30.000			.4531	-.0773	-.4429	-.4505	-.1510	-.0135	-.0231	-.3102	-.2382	-.1230	-.0774	-.0659	-.0358
60.000			.5298	.0031	-.3540	-.2648	-.0566	.1017	.0941	-.5127	-.4715	-.1430	.0351	.0059	-.0044
90.000		.9967	.5698	.0397	-.3026	-.1770	.0769	.2798	.4181	-.6463	-.2666	-.0919	-.0326	-.0091	
120.000			.5902	.0275	-.3269	-.2188	-.0011	.1590	.1925	-.4005	-.1172	.0167	-.0523	-.0676	.0269
135.000								.0988		.0219		-.0397		-.0885	
150.000			.5025	-.0234	-.3852	-.3031	-.0765	.0723	.1181	.2395	.1073	-.0727	-.2153	-.1737	-.0191
165.000				-.0788	-.4257	-.3763	-.0976	.0443	.1290	.2879	.2612	-.1773	-.2173	-.1841	.0029
180.000	1.0750	.8667	.4073	-.1181	-.4652	-.4166	-.0644	.0493	.1495	.2847	.2622	-.3033	-.2628	-.1990	-.0132
270.000		.6937							.4713						

X/LT .7460 .8530 .9280

PHI

.000	-.0278	-.0454	-.2708
30.000	-.0117	-.0147	-.2508
60.000	.0202	.0409	-.1208
90.000	.0316	-.0142	
120.000	.1346	.0426	.5817
135.000	.1449	.1549	.3609
150.000	.1083	.1916	.3535
165.000	.1257	.1979	.4832
180.000	.1043	.1623	.3108

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA( 6) = -.680 BETA( 4) = -3.970

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0950	.8172	.3833	-.1524	-.5011	-.5518	-.0774	.0019	.0027	-.1491	-.2118	-.0958	-.0491	-.0373	-.0215	
30.000			.4364	-.0970	-.4822	-.5187	-.1151	.0150	.0051	-.2533	-.2230	-.1219	-.0662	-.0582	-.0245	
60.000			.4878	-.0427	-.4053	-.2608	-.0432	.1173	.1124	-.5791	-.4775	-.1719	.0213	.0115	.0073	
90.000		.9319	.5152	-.0147	-.3686	-.1972	.0751	.2324	.4276	-.6672	-.2032	-.0334	-.0439	-.0110		
120.000			.5093	-.0152	-.3772	-.2285	.0036	.1625	.2074	-.3664	-.1740	-.0228	-.0741	-.0955	.0125	
135.000								.1112		.0278		-.0532		-.1230		
150.000			.4798	-.0447	-.3992	-.3312	-.0623	.0873	.1414	.2323	.0099	-.0589	-.2367	-.1940	-.0346	
165.000				-.0818	-.4300	-.4401	-.0765	.0624	.1448	.2886	.2397	-.1970	-.2223	-.1839	-.0008	
180.000	1.0950	.8759	.4158	-.1116	-.4591	-.4259	-.0642	.0690	.1611	.2844	.2623	-.3338	-.2233	-.1980	-.0252	
270.000		.7450							.4612							

X/LT .7460 .8530 .9280

PHI																
.000	-.0114	-.0254	-.2491													
30.000	.0004	.0022	-.2287													
60.000	.0239	.0471	-.1203													
90.000	.0457	.0657														
120.000	.1211	.0420	.5158													
135.000	.1284	.1427	.3296													
150.000	.0995	.1748	.3971													
165.000	.1237	.1870	.4244													
180.000	.1066	.1584	.2910													

ALPHA( 6) = -.680 BETA( 5) = -1.980

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1080	.8302	.3878	-.1466	-.4897	-.5522	-.0977	.0067	.0118	-.1404	-.1699	-.0934	-.0427	-.0260	-.0112	
30.000			.4147	-.1190	-.4630	-.5059	-.0840	.0269	.0259	-.2315	-.2058	-.1181	-.0576	-.0419	-.0196	
60.000			.4430	-.0863	-.4360	-.2550	-.0306	.1235	.1264	-.5558	-.4943	-.1780	.0251	.0041	.0039	
90.000		.9061	.4599	-.0714	-.4191	-.1867	.0753	.2833	.4329	-.6820	.0242	.0117	-.0705	-.0385		
120.000			.4601	-.0664	-.4076	-.2143	.0084	.1697	.2203	-.3379	-.1816	-.0183	-.0881	-.1078	.0058	
135.000								.1227		.0273		-.0625		-.1284		
150.000			.4537	-.0759	-.4223	-.3555	-.0536	.0980	.1576	.2227	.0885	-.0977	-.2453	-.1996	-.0394	
165.000				-.0888	-.4414	-.3660	-.0673	.0731	.1579	.2907	.2074	-.2509	-.2264	-.1827	.0008	
180.000	1.1080	.8780	.4224	-.1118	-.4502	-.4099	-.0554	.0787	.1670	.2880	.2497	-.3494	-.1974	-.1569	-.0189	
270.000		.7997							.4499							
X/LT		.7480	.8530	.9280												

X/LT .7480 .8530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 6) = -.660 BETA( 5) = -1.980

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI	.000	-.0014	-.0111	-.2466
30.000	.0058	.0065	-.2155	
60.000	.0257	.0451	-.1183	
90.000	.0445	.0829		
120.000	.0986	.0374	.4905	
135.000	.1054	.1141	.2500	
150.000	.0654	.1334	.2190	
165.000	.1025	.1599	.3787	
180.000	.0981	.1359	.2777	

ALPHA( 6) = -.660 BETA( 6) = .010

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0380 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI	.000	1.1080	.8319	.3874	-.1463	-.4978	-.5540	-.0897	.0119	.0127	-.1420	-.1795	-.0927	-.0378	-.0254	-.0087
30.000				.3951	-.1446	-.4952	-.5528	-.0853	.0383	.0419	-.2089	-.1974	-.1176	-.0591	-.0400	-.0190
60.000				.3960	-.1354	-.4859	-.3100	-.0173	.1350	.1395	-.5339	-.5240	-.2049	-.0017	-.0035	.0068
90.000			.6524	.4032	-.1265	-.4587	-.1925	.0922	.2912	.4414		-.7019	-.0058	.0015	-.1020	-.0563
120.000			.4101	-.1139	-.4575	-.2487	.0173	.1789	.2562	-.3082	-.1320	-.0525	-.1010	-.1181	-.0064	
135.000				.4214	-.1067	-.4477	-.3905	-.0459	.1262	.0317	-.1074	-.1466				
150.000					-.1065	-.4379	-.3749	-.0613	.0302	.1695	.2180	-.1100	-.2273	-.2610	-.2356	-.0685
165.000					-.1099	-.4434	-.3889	-.0499	.0767	.1641	.2816	.1724	-.2987	-.2343	-.1969	-.0170
180.000		1.1080	.8737	.4282	-.1099	-.4434	-.3889	-.0499	.0725	.1644	.2765	.2804	-.3336	-.1840	-.1669	-.0056
270.000			.8539													

X/LT .7460 .6530 .9280

PHI	.000	-.0017	-.0145	-.2553
30.000	.0018	-.0002	-.2254	
60.000	.0195	.0357	-.1145	
90.000	.0321	.0669		
120.000	.0795	.0283	.3594	
135.000	.0867	.0686	.1476	
150.000	.0424	.0797	.1416	
165.000	.0795	.0958	.1339	
180.000	.0874	.1022	.0792	

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ARC11-716 1A14 01\*Y12+S12N25+AT1D EXTERNAL TANK (R01731)

ALPHA0 (8) = -.670 BETA0 (7) = 2.050

SECTION (1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6240
PHI																
.0000	1.1040	.8277		.3826	-.1519	-.4946	-.5383	-.0626	.0051	.0092	-.1475	-.1763	-.0944	-.0430	-.0254	-.0164
30.000				.3602	-.1730	-.5218	-.5716	-.0751	.0432	.0519	-.1918	-.2130	-.1082	-.0612	-.0415	-.0196
60.000				.3441	-.1815	-.5326	-.2763	-.0072	.1413	.1518	-.5129	-.5209	-.1915	-.0146	-.0148	.0012
90.000		.8030		.3470	-.1807	-.5091	-.2197	.0899	.2969	.4512	-.6857	.0995	-.0136	-.1171	-.0771	
120.000				.3608	-.1666	-.4922	-.2973	.0212	.1836	.2513	-.2758	-.1806	-.0827	-.1166	-.1235	-.0165
150.000									.1290	.0393	.0393		-.1461		-.1449	
180.000				.3879	-.1365	-.4740	-.3261	-.0467	.1036	.1792	.2019	-.1502	-.3310	-.2893	-.2371	-.0477
210.000	1.1040	.8747		.4237	-.1190	-.4584	-.3412	-.0671	.0744	.1669	.2745	.1507	-.2841	-.2007	-.1621	-.0193
240.000					-.1097	-.4464	-.3912	-.0611	.0682	.1565	.2750	.2580	-.3542	-.1915	-.1809	-.0205
270.000			.9033						.4293							

X/LT .7460 .8530 .9280

PHI																
.000	-.0027	-.0140	-.2495													
30.000	.0025	-.0044	-.2418													
60.000	.0195	.0291	-.1101													
90.000	.0195	.0516														
120.000	.0623	.0217	.2994													
150.000	.0714	.0531	.0899													
180.000	.0361	.0598	.0034													
	.0744	.0939	.1692													
	.0806	.1090	.1043													

ALPHA0 (8) = -.680 BETA0 (8) = 4.050

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0950	.8115	.3729	-.1571	-.5078	-.5669	-.0936	-.0020	.0015	-.1556	-.2165	-.1040	-.0547	-.0378	-.0279	
30.000			.3224	-.2030	-.5501	-.5933	-.0669	.0905	.0624	-.1743	-.2376	-.1015	-.0579	-.0317	-.0306	
60.000			.2924	-.2312	-.5614	-.2911	.0055	.1499	.1669	-.4849	-.5064	-.2050	-.0316	-.0294	-.0119	
90.000		.7470	.2891	-.2347	-.5415	-.2859	.1070	.3083	.4628	-.6722	.0792	-.0360	-.1431	-.0975		
120.000			.3135	-.2131	-.5371	-.2093	.0261	.1883	.2644	-.2428	-.1816	-.1107	-.1319	-.0245		
150.000								.1340		.0475		-.1821		-.1671		
180.000			.3586	-.1759	-.5112	-.3444	-.0420	.1042	.1875	.1919	-.2484	-.4297	-.3097	-.2400	-.0546	
				-.1348	-.4809	-.4335	-.0689	.0601	.1648	.2691	.1277	-.3011	-.1939	-.1758	-.0407	
1.0950		.8832	.4234	-.1109	-.4651	-.4528	-.0692	.0629	.1471	.2705	.2496	-.3715	-.2345	-.2184	-.0370	
270.000		.9570							.4236							
X/LT		.7460	.6530	.9280												

PHI



DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 0A+112+312N25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 8 ) = -.680 BETA( 8 ) = 4.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI  
.000 -.0082 -.0259 -.2447  
30.000 -.0025 -.0111 -.2521  
60.000 .0098 .0164 -.1087  
90.000 .0014 .0339  
120.000 .0524 .0176 .2418  
135.000 .0596 .0601 .0567  
150.000 .0040 .0159 -.0175  
165.000 .0698 .0924 .1545  
180.000 .0708 .1119 .1372

ALPHA( 9 ) = -.690 BETA( 9 ) = 6.060

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0060 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5090 .5580 .6380  
PHI  
.000 1.0680 .7904 .3580 -.1686 -.5207 -.5937 -.1351 -.0262 -.0234 -.1725 -.2389 -.1164 -.0715 -.0516 -.0490  
30.000 .2839 -.2411 -.5689 -.6280 -.0610 .0474 .0640 .1729 .1658 -.1034 .0622 .0535 .0423  
60.000 .2454 .2863 .5890 .2670 .0155 .1528 .1729 .4600 .14978 .1942 .0584 .0387 .0277  
90.000 .6874 .2314 .2846 -.5716 .1944 .1107 .3135 .4705 .6499 .0942 .0687 .1656 .1283  
120.000 .2565 .2535 .5655 .1878 .0289 .1856 .2702 .2214 .1937 .1276 .1488 .1365 .0498  
135.000 .3044 .2123 .5410 .3415 .0475 .0972 .1887 .1773 .3123 .4731 .3104 .2482 .0969  
150.000 .1610 .5001 .4547 .0825 .0492 .1541 .2449 .1080 .3162 .2262 .2104 .0681  
165.000 1.0660 .8561 .4030 .1236 .4661 .4189 .0877 .0383 .2505 .2380 .3748 .2929 .0765  
180.000 1.0020  
270.000 .7460 .8330 .9280

PHI  
.000 -.0323 -.0466 -.2674  
30.000 -.0177 -.0205 .2544  
60.000 .0026 .0028 .1138  
90.000 .0293 .0120 .1998  
120.000 .0367 .0214 .0447  
135.000 .0441 .0536 .0350  
150.000 .0029 .0008 .1623  
165.000 .0437 .0789 .1623  
180.000 .0432 .0866 .1623

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01731)

ARC11-71.6 1A14 OR+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 6) = -.090 BETA( 10) = 8.080

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0360	.7541	.3366	-.1804	-.5291	-.5799	-.1676	-.0557	-.0503	-.1809	-.2509	-.1295	-.0951	-.0871	-.0758
30.000			.2423	-.2744	-.5925	-.6429	-.0628	.0347	.0590	-.1528	-.3137	-.1066	-.0660	-.0645	-.0324
60.000			.1952	-.3203	-.6250	-.2233	.0212	.1525	.1770	-.4413	-.4859	-.1805	-.0742	-.0368	-.0304
90.000		.6325	.1825	-.3218	-.5986	-.1468	.1039	.3116	.4808	-.6340	.0690	.0690	-.1038	-.1943	-.1782
120.000			.2094	-.3011	-.6018	-.1732	.0343	.1820	.2621	-.1989	-.2419	-.1388	-.1699	-.1620	-.0345
135.000								.1307		.0461		-.2607		-.1990	
150.000			.2715	-.2468	-.5675	-.3986	-.0530	.0913	.1897	.1663	-.3920	-.5178	-.3175	-.2632	-.1171
165.000				-.1851	-.5208	-.3203	-.0973	.0316	.1357	.2236	.0710	-.3261	-.2994	-.2446	-.0929
180.000	1.0360	.7553	.3938	-.1316	-.4687	-.4797	-.0983	.0207	.1079	.2377	.2121	-.3323	-.3317	-.2701	-.1107
270.000		1.0420						.4098							
X/LT	.7480	.6530	.9280												

PHI

.070	-.0997	-.0719	-.2962
30.000	-.0271	-.0334	-.2575
60.000	-.0131	-.0149	-.1251
90.000	-.0770	-.0230	
120.000	.0196	.0111	.1854
135.000	.0243	.0437	.0319
150.000	-.0235	-.0121	-.0667
165.000	.0183	.0556	.1499
180.000	-.0005	.0549	.1571

ALPHA( 6) = -.090 BETA( 11) = 10.120

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	.9945	.7278	.3067	-.2037	-.5418	-.5772	-.2062	-.0876	-.0869	-.1832	-.2548	-.1608	-.1244	-.1160	-.1017
30.000			.1933	-.3181	-.6275	-.6303	-.0984	.0237	.0458	-.1448	-.2942	-.1174	-.0758	-.0748	-.0584
60.000			.1420	-.3573	-.6473	-.1908	.0346	.1697	.1748	-.4269	-.4610	-.1995	-.0793	-.0673	-.0477
90.000		.5712	.1312	-.3471	-.6277	-.0815	.0924	.2937	.4927	-.5842	.0755	-.1392	-.1392	-.2255	-.2225
120.000			.1604	-.3466	-.6206	-.1469	.0355	.1750	.2452	-.1869	-.2603	-.1890	-.1941	-.1962	-.1115
135.000								.1261		.0369		-.2929		-.2176	
150.000			.2238	-.2867	-.5846	-.3414	-.0619	.0797	.1805	.1487	-.3755	-.5417	-.3410	-.2747	-.1341
165.000				-.2103	-.3246	-.5473	-.1159	.0080	.1110	.1933	.0317	-.3103	-.3101	-.2839	-.1224
180.000	.9945	.7201	.3794	-.1435	-.4624	-.4834	-.1124	-.0039	.0752	.2056	.1863	-.4458	-.4284	-.3143	-.1540
270.000		1.0740													
X/LT	.7480	.6530	.9280												

PHI

.070	-.0997	-.0719	-.2962
30.000	-.0271	-.0334	-.2575
60.000	-.0131	-.0149	-.1251
90.000	-.0770	-.0230	
120.000	.0196	.0111	.1854
135.000	.0243	.0437	.0319
150.000	-.0235	-.0121	-.0667
165.000	.0183	.0556	.1499
180.000	-.0005	.0549	.1571



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(R01731)

ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 6 ) = -.000 BETA( 11 ) = 10.120

SECTION ( 1 ) EXTERNAL TANK

W/LT	.7480	.8330	.9280
PMI			
.000	-.0866	-.1069	-.3297
30.000	-.0453	-.0370	-.2801
60.000	-.0293	-.0344	-.1363
90.000	-.1199	-.0338	
120.000	.0038	-.0059	.1620
135.000	.0075	.0313	.0094
150.000	-.0373	-.0284	-.1004
165.000	-.0121	.0347	.1333
180.000	-.0393	.0245	.1348

ALPHA( 7 ) = 2.000 BETA( 1 ) = -10.000

SECTION ( 1 ) EXTERNAL TANK

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5380	.6380
PMI															
.000	.9956	.7786	.3892	-.1254	-.4819	-.5241	-.3233	-.0787	-.0684	-.1415	-.2173	-.1438	-.1124	-.1085	-.1009
30.000			.5489	.0315	-.3260	-.3902	-.2011	-.0334	-.0421	-.2866	-.1929	-.1141	-.0813	-.0756	-.0470
60.000			.6630	.1459	-.2011	-.1807	-.0240	.1316	.1311	-.5775	-.3439	-.0573	.0408	.0107	.0120
90.000		1.0750	.6817	.1617	-.1612	-.1193	.1076	.2837	.4083		-.5365	-.2721	-.1574	-.1106	-.0512
120.000			.5926	.0831	-.2464	-.2197	-.0401	.0918	.0905	-.4209	-.3135	.1237	.0373	.0110	.0677
135.000								.0238		.0245		.0366		-.0142	
150.000			.4725	-.0402	-.3693	-.3688	-.1612	-.0085	.0154	.2307	.1679	-.1114	-.1878	-.1337	-.0073
165.000				-.1390	-.4694	-.4741	-.1461	-.0310	.0491	.2374	.2490	-.0830	-.1913	-.1717	.0003
180.000	.9956	.7794	.3071	-.2063	-.5247	-.5319	-.1273	-.0098	.1034	.2579	.2327	-.3720	-.2658	-.2109	-.0578
270.000		.5639													.5027

W/LT	.7480	.8330	.9280
PMI			
.000	-.0871	-.1021	-.3281
30.000	-.0330	-.0339	-.2798
60.000	.0336	.0389	-.1321
90.000	-.0103	-.1006	
120.000	.1955	.1271	.6818
135.000	.2094	.2184	.4048
150.000	.1880	.2459	.4588
165.000	.1613	.2425	.5358
180.000	.1177	.1895	.3491

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ARC11-716 1A14 01+112+512N25+AT10 EXTERNAL TANK (R81731)

ALPHA( 7) = 1.980 BETA( 2) = -5.980

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0680	.8996	.4373	-.0967	-.4634	-.6874	-.1603	-.0146	-.0026	-.1212	-.1970	-.1041	-.0997	-.0471	-.0398
30.000		.5268	-.0062	-.0062	-.3827	-.3808	-.1414	.0188	.0175	-.2403	-.2114	-.1065	-.0439	-.0370	-.0215
60.000			.5787	.0487	-.3179	-.2340	-.0267	.1420	.1532	-.3221	-.4152	-.1380	.0283	.0272	.0227
90.000		.9946	.5710	.0438	-.3118	-.1858	.0736	.2747	.4151	-.6039	-.0876	-.0118	-.0289	-.0067	
120.000			.5052	-.0151	-.3704	-.2644	-.0284	.1124	.1211	-.3217	-.3503	.0088	.0139	-.0393	.0330
135.000								.0390		.0258		-.0801		-.0629	
150.000			.4343	-.0912	-.4450	-.3570	-.0853	.0375	.0723	.2261	.1145	-.1277	-.1784	-.1540	-.0088
165.000				-.1494	-.4892	-.4621	-.1042	.0212	.1014	.2653	.2421	-.1566	-.1587	-.1741	.0172
180.000	1.0680	.8001	.3336	-.1901	-.5137	-.4366	-.0998	.0392	.1362	.2660	.2450	-.3122	-.2338	-.1806	-.0051
270.000		.6813						.4725							

X/LT .7460 .8530 .9280

PMI

.000	-.0216	-.0341	-.2423
30.000	.0080	.0031	-.2273
60.000	.0436	.0655	-.1055
90.000	.0631	.0519	
120.000	.1531	.1123	.5759
135.000	.1632	.1679	.3584
150.000	.1336	.2126	.3547
165.000	.1468	.2200	.4916
180.000	.1235	.1830	.3207

ALPHA( 7) = 1.970 BETA( 3) = -3.580

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0940	.8840	.4523	-.0830	-.4320	-.4997	-.1026	-.0027	.0186	-.1159	-.1719	-.0957	-.0483	-.0243	-.0203
30.000		.5902	-.0332	-.4092	-.4303	-.0911	.0316	.0411	.0411	-.2118	-.1993	-.1062	-.0323	-.0303	-.0200
60.000		.2255	-.0037	-.3764	-.2396	-.0255	.1420	.1734	.1734	-.5046	-.4267	-.1649	.0156	.0169	.0090
90.000	.9496	.5220	-.0158	-.3801	-.1798	.0673	.2710	.4233	.4233	-.6551	-.0982	.0226	-.0320	-.0312	
120.000		.4681	-.0568	-.4217	-.2715	-.0183	.1295	.1438	.1438	-.3416	-.3564	-.0476	-.0100	-.0607	.0813
135.000							.0821		.0193		-.1102			-.0860	
150.000		.4156	-.1143	-.4739	-.4252	-.0799	.0616	.0983	.2159	.0261	.1107	-.1736	-.1714	-.0162	
165.000			-.1569	-.5013	-.5213	-.0854	.0497	.1211	.2748	.2211	-.2075	-.1818	-.1739	.0137	
180.000	1.0940	.8056	.3432	-.1855	-.5193	-.4536	-.0672	.0692	.1463	.2674	.2445	-.3479	-.1928	-.1761	-.0169
270.000		.7437						.4991							

X/LT .7460 .8530 .9280

PMI

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01-712-512N25-AT10 EXTERNAL TANK (N81731)

ALPHA( 7 ) = 1.870 BETA( 3 ) = -3.900

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE C<sub>1</sub>

W/LT .7460 .8330 .9260

PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT
.000	- .0045	- .0137	- .2200	.000	- .0045	- .0137	- .2200	.000	- .0045
30.000	.0090	.0098	- .1969	30.000	.0090	.0098	- .1969	30.000	.0090
60.000	.0429	.0629	- .0920	60.000	.0429	.0629	- .0920	60.000	.0429
90.000	.0662	.0952		90.000	.0662	.0952		90.000	.0662
120.000	.1358	.1166	.9026	120.000	.1358	.1166	.9026	120.000	.1358
150.000	.1467	.1716	.3256	150.000	.1467	.1716	.3256	150.000	.1467
180.000	.1216	.1938	.2978	180.000	.1216	.1938	.2978	180.000	.1216
210.000	.1430	.2139	.4457	210.000	.1430	.2139	.4457	210.000	.1430
240.000	.1261	.1827	.9360	240.000	.1261	.1827	.9360	240.000	.1261

ALPHA( 7 ) = 1.980 BETA( 4 ) = -1.990

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C<sub>1</sub>

W/LT .0000 .0000 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5030 .5560 .6360

PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT
.000	1.1070	.8449	.4593	-.0743	-.4471	-.5163	-.1009	.0132	.0703	-.1108	-.1610	-.1001	-.0366	-.0121	-.0070
30.000			.4782	-.0538	-.4339	-.4921	-.0906	.0440	.0616	-.1875	-.1856	-.1046	-.0370	-.0279	-.0031
60.000			.4792	-.0506	-.4251	-.3397	-.0161	.1325	.1926	-.4730	-.4027	-.1872	-.0015	.0031	.0092
90.000		.8988	.4560	-.0726	-.4319	-.1743	.0739	.2773	.4300		-.6519	-.1016	.0041	-.0830	-.0543
120.000			.4184	-.1067	-.4535	-.3047	-.0826	.1399	.1631	-.3151	-.3410	-.0675	-.0392	-.0872	.0068
150.000			.3868	-.1373	-.4735	-.4187	-.0537	.0766	.1206	.0248	-.0808	-.1614	-.324	-.1894	-.0299
180.000				-.1634	-.4877	-.4544	-.0650	.0616	.1371	.2717	.1301	-.2633	-.1832	-.1871	.0078
210.000	1.1070	.8082	.5005	-.1806	-.5093	-.4382	-.0512	.0714	.1490	.2667	.2453	-.3637	-.1615	-.1448	-.0067
240.000		.8016													

W/LT .7460 .8330 .9260

PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT	PMI	W/LT
.000	.0108	-.0003	-.2185	.000	.0108	-.0003	-.2185	.000	.0108
30.000	.0182	.0175	-.1957	30.000	.0182	.0175	-.1957	30.000	.0182
60.000	.0366	.0376	-.0733	60.000	.0366	.0376	-.0733	60.000	.0366
90.000	.0549	.1058		90.000	.0549	.1058		90.000	.0549
120.000	.1148	.1016	.4540	120.000	.1148	.1016	.4540	120.000	.1148
150.000	.1232	.1474	.2596	150.000	.1232	.1474	.2596	150.000	.1232
180.000	.0893	.1600	.2319	180.000	.0893	.1600	.2319	180.000	.0893
210.000	.1241	.1812	.3562	210.000	.1241	.1812	.3562	210.000	.1241
240.000	.1033	.1567	.2783	240.000	.1033	.1567	.2783	240.000	.1033

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-715 1A14 ON-T12-S12N25-AT10 EXTERNAL TANK (R81731)

ALPHA01 (1) = 1.000 BETA0 (5) = .060

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0400	.1100	.1700	.1940	.2100	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6300
PMI															
.000	1.1070	.9007	.4611	-.0737	-.4350	-.5055	-.0900	.0193	.0331	-.1078	-.1460	-.0900	-.0341	-.0133	.0029
30.000			.4530	-.0834	-.4458	-.5075	-.0802	.0504	.0707	-.1602	-.1799	-.1036	-.0356	-.0287	-.0109
60.000			.4267	-.1020	-.4580	-.3796	-.0089	.1581	.1942	-.4442	-.4061	-.1969	-.0116	-.0032	.0019
90.000		.0486	.4003	-.1262	-.4712	-.1613	.0773	.2834	.4402	-.6846	-.6846	-.1039	-.0175	-.1003	-.0715
120.000			.3750	-.1528	-.4877	-.2943	.0134	.1542	.1840	-.2804	-.3307	-.0971	-.0484	-.0832	.0037
135.000							.1127	.1127	.0276	.0276		-.1525		-.1120	
150.000			.3622	-.1671	-.5019	-.4286	-.0442	.0904	.1455	.2097	-.1557	-.2540	-.2041	-.1905	-.0452
165.000				-.1667	-.5104	-.4017	-.0568	.0704	.1485	.2714	.1574	-.2989	-.1902	-.1604	-.0013
180.000	1.1070	.0043	.3592	-.1777	-.5207	-.4227	-.0467	.0667	.1453	.2664	.2469	-.3593	-.1512	-.1571	.0118
270.000		.0535													
K/LT	.7400	.8530	.9280												

PMI

.000	.0145	.0038	-.2168												
30.000	.0125	.0176	-.2026												
60.000	.0291	.0498	-.0709												
90.000	.0332	.0594													
120.000	.0974	.0778	.3786												
135.000	.1036	.0545	.1584												
150.000	.0731	.1037	.1537												
165.000	.1045	.1233	.1352												
180.000	.1070	.1305	.0892												

ALPHA01 (1) = 1.000 BETA0 (5) = 2.040

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0400	.1100	.1700	.1940	.2100	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6300
PMI															
.000	1.1040	.8942	.4590	-.0844	-.4489	-.5038	-.0596	.0157	.0287	-.1106	-.1561	-.0932	-.0394	-.0174	-.0000
30.000			.4199	-.1200	-.4746	-.5430	-.0672	.0335	.0773	-.1459	-.1951	-.1153	-.0396	-.0292	-.0142
60.000			.3783	-.1524	-.4964	-.3996	.0021	.1620	.2026	-.4228	-.4221	-.1912	-.0263	-.0122	-.0028
90.000		.7994	.3475	-.1806	-.5179	-.1635	.0865	.2894	.4336	-.7157	-.7157	-.1109	-.0332	-.1394	-.0873
120.000			.3249	-.1932	-.5314	-.3989	.0337	.1691	.6000	-.2727	-.3327	-.1067	-.0703	-.1009	-.0033
135.000							.1234	.1234	.0353	.0353		-.1984		-.1233	
150.000			.3348	-.1949	-.5321	-.4574	-.0349	.1000	.1610	.2053	-.1628	-.3290	-.2474	-.2053	-.0334
165.000				-.1818	-.5225	-.5016	-.0567	.0731	.1336	.2362	.1446	-.2974	-.1706	-.1330	.0001
180.000	1.1040	.0097	.3581	-.1747	-.5039	-.5173	-.0609	.0223	.1435	.2606	.2490	-.3831	-.1607	-.1506	-.0033
270.000		.0048													
K/LT	.7400	.8530	.9280												

PMI

(M81731)

ARC11-716 IAI14 OR-112-S1225-AT10 EXTERNAL TANK

ALMAAD ( 7 ) = 1.070 BETAD ( 6 ) = 2.040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .7400 .6550 .9200

Wt  
 .000 .0036 .0019 -.2126  
 30.000 .0063 .0152 -.2077  
 60.000 .0236 .0421 -.0878  
 90.000 .0211 .0767  
 120.000 .0847 .0645 .3352  
 150.000 .0919 .0926 .1043  
 180.000 .0829 .0925 .0268  
 210.000 .0959 .1252 .1857  
 240.000 .1026 .1369 .1175

ALMAAD ( 7 ) = 2.050 BETAD ( 7 ) = 4.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .0000 .0300 .0490 .1130 .1700 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580

Wt  
 .000 1.0530 .8753 .4222 -.0907 -.4564 -.5149 -.0744 .0017 .0142 -.1206 -.1746 -.1019 -.0467 -.0279 -.0180  
 30.000 .3757 -.1535 -.5061 -.5669 -.0729 .0512 .0765 -.1355 -.2178 -.1139 -.0430 -.0326 -.0269  
 60.000 .3240 -.2046 -.5367 -.3763 .0141 .1712 .2057 -.4016 -.4296 -.1665 -.0346 -.0254 -.0104  
 90.000 .7421 .2897 .2357 -.5620 -.1561 .0932 .2967 .4635 -.7340 -.1341 -.0882 -.1749 -.1108  
 120.000 .2835 -.2357 -.5470 -.3584 .0398 .1755 .2230 -.2580 -.3347 -.1326 -.0920 -.1130 -.0138  
 150.000 .3011 .3011 -.2247 -.5495 -.3287 -.0343 .0995 .1675 .1828 -.2153 -.4019 -.2739 -.2089 -.0430  
 180.000 .3499 .3499 -.1992 -.5311 -.4825 -.0623 .0627 .1493 .2536 .1213 .3153 .1702 .1505 -.0237  
 210.000 .9549 .9549 -.1813 -.5130 -.4980 -.0710 .0508 .1238 .2518 .2417 .3956 .1964 .1923 -.0223  
 240.000 .7400 .6550 .9200 .4236

Wt

.000 -.0034 -.0096 -.2201  
 30.000 -.0037 .0015 -.2216  
 60.000 .0107 .0297 -.1040  
 90.000 .0159 .0631  
 120.000 .0762 .0540 .2777  
 150.000 .0613 .0879 .0769  
 180.000 .0334 .0473 .0080  
 210.000 .0905 .1204 .1604  
 240.000 .0940 .1326 .1638

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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 01+712+S12N25-AT10 EXTERNAL TANK

(R91T31)

ALPHA( 7 ) = 2.090 BETA( 8 ) = 6.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5960	.6380
PHI															
.000	1.0690	.8595	.4346	-.0991	-.4610	-.5163	-.1430	-.0191	-.0040	-.1288	-.2088	-.1131	-.0640	-.0472	-.0337
30.000			.3411	-.1850	-.5348	-.5985	-.0518	.0426	.0760	-.1258	-.2701	-.1134	-.0532	-.0467	-.0322
60.000			.2723	-.2576	-.5751	-.4645	.0162	.1735	.2184	-.3823	-.4244	-.1465	-.0477	-.0391	-.0145
90.000		.6869	.2353	-.2894	-.5873	-.1535	.0952	.3019	.4756	-.7588	-.1231	-.0915	-.1733	-.1157	
120.000			.2333	-.2874	-.5819	-.2105	.0370	.1808	.2416	-.2393	-.3272	-.1418	-.1284	-.1293	-.0354
135.000								.1269	.0432			-.2322		-.1603	
150.000			.2643	-.2626	-.5697	-.2978	-.0319	.0983	.1726	.1718	-.2781	-.4695	-.2847	-.2337	-.0765
165.000				-.2226	-.5424	-.5163	-.0671	.0518	.1408	.2420	.1027	-.3005	-.2022	-.1905	-.0514
180.000	1.0690	.8008	.3328	-.1940	-.5209	-.5300	-.0804	.0308	.1080	.2349	.2238	-.3860	-.2573	-.2153	-.0644
270.000		.9950							.4175						

X/LT .7460 .8530 .9280

PHI

.000	-.0226	-.0334	-.2399
30.000	-.0140	-.0106	-.2302
60.000	.0043	.0186	-.1178
90.000	.0018	.0549	
120.000	.0610	.0591	.2357
135.000	.0620	.0854	.0649
150.000	.0176	.0307	-.0138
165.000	.0630	.0991	.1847
180.000	.0801	.1067	.1813

ALPHA( 7 ) = 2.040 BETA( 9 ) = 8.090

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5960	.6380
PHI															
.000	1.0370	.8218	.4116	-.1074	-.4706	-.5287	-.1916	-.0485	-.0326	-.1389	-.2270	-.1268	-.0881	-.0743	-.0666
30.000			.2907	-.2261	-.5667	-.6208	-.0846	.0299	.0654	-.1157	-.2859	-.1055	-.0654	-.0537	-.0487
60.000			.2123	-.3006	-.6048	-.4163	.0247	.1750	.2287	-.3654	-.4072	-.1368	-.0641	-.0451	-.0356
90.000		.6296	.1901	-.3245	-.6204	-.1262	.0930	.2999	.4897	-.8296	-.0962	-.0962	-.1757	-.1303	
120.000			.1826	-.3243	-.6199	-.1618	.0338	.1740	.2563	-.2443	-.3550	-.1519	-.1617	-.1514	-.0648
135.000								.1255	.0294			-.2548		-.1803	
150.000			.2250	-.2912	-.5962	-.3140	-.0312	.0982	.1753	.1546	-.3724	-.4784	-.2882	-.2495	-.1114
165.000				-.2460	-.5708	-.5824	-.0779	.0403	.1292	.2092	.0697	-.3139	-.2397	-.2255	-.0821
180.000	1.0370	.7044	.3284	-.1996	-.5363	-.5592	-.0917	.0112	.0909	.2016	.1853	-.3636	-.2986	-.2634	-.1034
270.000		1.0410							.4135						

X/LT .7460 .8530 .9280

PHI

.000			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			
270.000			

DATE 08 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

(RB1731)

ARC11-716 IAI4 OL+712+S12N25+AT10 EXTERNAL TANK

ALPHA( 7) = 2.040 BETA( 9) = 8.090

SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI

.000 -.0312 -.0632 -.2719  
30.000 -.0294 -.0238 -.2336  
60.000 -.0131 -.0028 -.1379  
90.000 -.0191 .0335  
120.000 .0449 .0459 .2198  
135.000 .0395 .0716 .0553  
150.000 -.0060 .0121 -.0415  
165.000 .0335 .0751 .1707  
180.000 .0140 .0684 .1679

ALPHA( 7) = 2.020 BETA( 10) = 10.110

SECTION ( 1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 .9936 .7749 .3797 -.1362 -.4864 -.5261 -.2731 -.0875 -.0719 -.1928 -.2433 -.1526 -.1145 -.1135 -.1003  
30.000 .2373 -.2730 -.6011 -.6500 -.1252 .0094 .0533 -.1144 -.3143 -.1103 -.0729 -.0766 -.0656  
60.000 .1563 -.3479 -.6278 -.4673 .0493 .1885 .2363 -.1334 -.3698 -.1334 -.0806 -.0624 -.0474  
90.000 .5657 .1262 -.3456 -.6376 -.1078 .0710 .2961 .4560 .8621 -.0617 -.1073 -.1703 -.1266  
120.000 .1314 -.3561 -.6415 -.1456 .0269 .1644 .2430 -.2419 -.3270 -.1878 -.2096 -.1949 -.0852  
135.000 .1762 -.3308 -.6212 -.2482 -.0370 .0989 .1657 .1290 .4087 .5008 .3310 .2714 .1386  
150.000 .2739 -.5872 .5558 .0961 .0125 .1004 .1732 .0192 .3171 .2929 .2781 .1165  
165.000 .9936 .6399 .3062 .2194 -.5319 .5543 .1058 .0148 .1523 .3799 .4014 .3121 .1620  
180.000 1.0760 .4073  
270.000

X/LT .7460 .8330 .9280

PHI

.000 -.0914 -.1044 -.3236  
30.000 -.0479 -.0569 -.2738  
60.000 -.0346 -.0331 .1642  
90.000 -.0474 .0058  
120.000 .0232 .0236 .2154  
135.000 .0245 .0380 .0464  
150.000 .0195 .0024 .0778  
165.000 .0008 .0499 .1568  
180.000 .0301 .0313 .1432

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TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4540

(881731)

ARC11-716 IA14 01+712+312N25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 4.110 BETA( 1 ) = -10.000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9873	.8214	.4391	-.0784	-.4377	-.4800	-.3675	-.0762	-.0575	-.1179	-.1939	-.1217	-.0961	-.0910	-.0871
30.000			.5994	.0776	-.2792	-.3092	-.1636	-.0058	-.0043	-.1958	-.1743	-.0847	-.0403	-.0470	-.0322
60.000			.6900	.1745	-.1698	-.1563	-.0016	.1597	.1743	-.5142	-.3222	-.0663	.0601	.0392	.0436
90.000		1.0610	.6697	.1571	-.1676	-.1241	.0823	.2653	.3863	-.4912	-.1150	.0331	-.0288	-.0080	
120.000			.5461	.0335	-.2790	-.2577	-.0674	.0464	.0266	-.1221	-.4178	.0277	.1100	.0419	.0749
155.000								-.0248		.0448	-.0306			.0156	
180.000			.4090	-.1026	-.4152	-.4117	-.1751	-.0460	-.0199	.2131	.1047	-.1500	-.1466	-.1180	-.0075
165.000					-.1980	-.5252	-.5005	-.1398	.0329	.2398	.2120	-.0919	-.1402	-.1909	.0038
180.000	.9873	.7219	.2483	-.2624	-.5669	-.4973	-.1043	-.0216	.0322	.2445	.2120	-.3562	-.2378	-.2028	-.0348
270.000		.5518													.4806

X/LT .7480 .8530 .9280

PHI

.000	-.0770	-.0979	-.3113
30.000	-.0104	-.0184	-.2625
60.000	.0643	.0826	-.1148
90.000	.0638	.0097	
120.000	.1980	.1940	.6320
135.000	.2098	.2295	.3794
150.000	.1542	.2383	.4362
165.000	.1662	.2432	.5347
180.000	.1185	.1880	.3326

ALPHA( 8 ) = 4.130 BETA( 2 ) = -7.960

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0500	.8688	.4882	-.0554	-.4266	-.4657	-.3596	-.0392	-.0185	-.1009	-.1655	-.0952	-.0677	-.0605	-.0541
30.000			.5856	.0621	-.3021	-.3260	-.1429	.0159	.0245	-.1943	-.1519	-.0742	-.0315	-.0308	-.0213
60.000			.6454	.1229	-.2267	-.1904	-.0084	.1599	.1871	-.4909	-.3196	-.0781	.0493	.0388	.0325
90.000		1.0190	.6114	.0953	-.2323	-.1526	.0676	.2612	.3880	-.5200	-.1428	.0064	-.0413	-.0055	
120.000			.5041	-.0116	-.3381	-.2763	-.0699	.0425	.0425	-.1449	-.4226	-.0333	.0783	.0181	.0545
155.000								.0034		.0449	-.1051			-.0128	
180.000			.3951	-.1213	-.4521	-.4085	-.1216	.0147	.0147	.2156	.0937	-.1656	-.1367	-.1276	-.0003
165.000				-.1951	-.5375	-.4657	-.0864	.0611	.0611	.2423	.2169	-.1369	-.1230	-.1532	.0240
180.000	1.0500	.7392	.2686	-.2523	-.5631	-.4092	-.0997	.0137	.1117	.2516	.2340	-.2984	-.2351	-.1732	-.0172
270.000		.6171													.4650

X/LT .7480 .8530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01731)

ARC11-716 1A14 OL+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 4.130 BETA( 2 ) = -7.960

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI  
.000 -.0422 -.0577 -.2603  
30.000 .0049 .0068 -.2297  
60.000 .0581 .0835 -.1010  
90.000 .0665 .0671  
120.000 .1796 .1739 .6062  
135.000 .1921 .2133 .3635  
150.000 .1451 .2243 .4026  
165.000 .1609 .2307 .5047  
180.000 .1250 .1881 .3232

ALPHA( 8 ) = 4.130 BETA( 3 ) = -5.960

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0089 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI  
.000 1.0620 .9000 .4925 -.0400 -.4240 -.4531 -.2325 -.0154 .0093 -.0934 -.1499 -.0757 -.0460 -.0412 -.0280  
30.000 .5750 .0413 -.2403 -.3451 -.1343 .0391 .0475 -.1815 -.1668 -.0698 -.0187 -.0184 -.0087  
60.000 .6007 .0726 -.2892 -.2240 -.0142 .1613 .1988 -.4653 -.3221 -.0970 .0303 .0230 .0229  
90.000 .9760 .5577 .3092 -.1924 .0582 .2589 .3932 -.5563 -.1748 .0029 -.0503 -.0200  
120.000 .4618 -.0577 -.4004 -.2950 -.0534 .0718 .0588 -.1494 -.4435 -.0782 -.0139 .0367  
135.000 .3759 -.1498 -.4880 -.4200 -.0983 .0120 .0390 .2148 .0841 -.1795 -.1345 -.1436 -.0020  
150.000 .2048 -.5425 -.4769 -.0803 .0115 .0848 .2496 .2180 .1693 .1395 .1589 .0213  
165.000 .2770 .2471 .5554 .3498 .1045 .1240 .2537 .2302 .3284 .2093 .1579 .0013  
180.000 .7448 .6736 .4486

X/LT .7460 .8530 .9280

PHI  
.000 -.0145 -.0261 -.2276  
30.000 .0142 .0198 -.2048  
60.000 .0336 .0803 -.0866  
90.000 .0740 .0921  
120.000 .1613 .1656 .5522  
135.000 .1726 .2010 .3283  
150.000 .1336 .2037 .3391  
165.000 .1399 .2251 .4701  
180.000 .1324 .1907 .3141

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ARC11-716 IA14 OA+T12+S12M25+AT10 EXTERNAL TANK (R81T31)

ALPHA(8) = 4.160 BETA(4) = -3.960

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0840	.9303	.5043	-.0338	-.4134	-.4688	-.1277	.0009	.0268	-.0829	-.1355	-.0671	-.0349	-.0248	-.0131
30.000			.5490	.0081	-.3655	-.3625	-.0624	.0449	.0829	-.1724	-.1484	-.0721	-.0189	-.0102	-.0045
60.000			.5478	.0105	-.3475	-.2363	-.0198	.1608	.2067	-.4470	-.3138	-.0997	.0132	.0115	.0170
90.000		.9327	.5024	-.0271	-.3870	-.1939	.0516	.2575	.3986		-.6021	-.1782	-.0350	-.0687	-.0312
120.000			.4222	-.1012	-.4529	-.3036	-.0445	.0887	.0811	-.2092	-.4370	-.0917	-.0005	-.0514	.0191
135.000								.0482		.0415		-.1824		-.0660	
150.000			.3595	-.1715	-.5097	-.4527	-.0808	.0324	.0710	.2053	.0396	-.1541	-.1384	-.1478	-.0093
165.000				-.2080	-.5412	-.4968	-.0825	.0369	.1043	.2584	.2027	-.2109	-.1622	-.1368	.0181
180.000	1.0840	.7487	.2867	-.2424	-.5505	-.3513	-.0672	.0651	.1315	.2321	.2325	-.3657	-.1781	-.1580	-.0098
270.000		.7323						.4364							

X/LT .7480 .8530 .9280

PHI

.000	.0029	-.0011	-.2131
30.000	.0198	.0270	-.1893
60.000	.0443	.0715	-.0765
90.000	.0683	.1137	
120.000	.1405	.1565	.4840
135.000	.1572	.1888	.3032
150.000	.1306	.1969	.2772
165.000	.1513	.2145	.4346
180.000	.1351	.1872	.3123

ALPHA(8) = 4.040 BETA(5) = -1.980

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0980	.9431	.5141	-.0236	-.4082	-.4705	-.1094	.0164	.0421	-.0799	-.1198	-.0611	-.0280	-.0142	.0012
30.000			.5311	-.0049	-.3921	-.4487	-.0926	.0536	.0788	-.1459	-.1368	-.0730	-.0196	-.0113	.0024
60.000			.5016	-.0312	-.3999	-.3109	-.0172	.1682	.2171	-.4175	-.2931	-.1130	-.0003	.0046	.0100
90.000		.8880	.4473	-.0783	-.4368	-.1812	.0582	.2636	.4108		-.6183	-.1926	-.0633	-.0978	-.0478
120.000			.3823	-.1391	-.4841	-.3354	-.0180	.1087	.1094	-.2127	-.4281	-.1132	-.0191	-.0688	.0125
135.000								.0719		.0356		-.1599		-.0892	
150.000			.3389	-.1840	-.5105	-.4567	-.0538	.0575	.0968	.1999	-.0686	-.1673	-.1518	-.1818	-.0222
165.000				-.2127	-.5297	-.3936	-.0656	.0509	.1219	.2536	.1785	-.2561	-.1661	-.1399	.0195
180.000	1.0980	.7533	.2945	-.2350	-.5561	-.2879	-.0321	.0560	.1231	.2455	.2419	-.3719	-.1582	-.1237	.0041
270.000		.7845						.4303							

X/LT .7480 .8530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (R81731)

ALPHA( 8 ) = 4.040 BETA( 5 ) = -.1380

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI  
.000 .0176 .0125 -.1996  
30.000 .0208 .0313 -.1640  
60.000 .0394 .0679 -.0664  
90.000 .0616 .1093  
120.000 .1292 .1331 .4309  
135.000 .1377 .1758 .2529  
150.000 .1056 .1663 .2284  
165.000 .1372 .1929 .3960  
180.000 .1208 .1708 .2894

ALPHA( 8 ) = 4.050 BETA( 6 ) = .030

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI  
.000 1.0960 .9460 .5143 -.0213 -.4034 -.4698 -.1030 .0210 .0446 -.0839 -.1106 -.0553 -.0207 -.0055 .0061  
30.000 .4955 -.0432 -.4175 -.4798 -.0850 .0332 .0858 -.1304 -.1398 -.0682 -.0231 -.0143 -.0037  
60.000 .4507 -.0823 -.4499 -.3531 -.0143 .1641 .2264 -.3975 -.2726 -.0895 -.0167 -.0153 -.0001  
90.000 .6340 .3915 -.1281 -.4791 -.1879 .0610 .2666 .4183  
120.000 .3384 -.1855 -.5017 -.3608 -.0023 .1738 .1268 -.2175 -.4148 -.1306 -.0494 -.0802 .0117  
135.000 .3135 -.2183 -.5393 -.4304 -.0535 .0738 .1213 .1954 -.1477 -.2542 -.1871 -.1730 -.0403  
150.000 .2188 -.5501 -.3701 -.0626 .0569 .1330 .2529 .1575 -.2965 -.1794 -.1375 .0092  
165.000 .2993 -.2292 -.5494 -.3071 -.0557 .0591 .1313 .2512 .2414 -.3691 -.1415 -.1125 .0210  
180.000 .7496 .6391  
270.000 .4186

X/LT .7460 .6530 .9280

PHI  
.000 .0190 .0129 -.1989  
30.000 .0171 .0250 -.1930  
60.000 .0306 .0545 -.0842  
90.000 .0341 .0845  
120.000 .1149 .1031 .3799  
135.000 .1139 .1196 .1678  
150.000 .0832 .1253 .1678  
165.000 .1145 .1427 .1589  
180.000 .1233 .1437 .1027

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01-712-512N25-AT10 EXTERNAL TANK (R81731)

ALPHA( 8 ) = 4.030 BETA( 7 ) = 2.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0930	.9412	.5091	-.0276	-.4119	-.4565	-.0194	.0173	.0435	-.0870	-.1110	-.0595	-.0261	-.0120	-.0033
30.000			.4591	-.0708	-.4527	-.5092	-.0820	.0523	.0866	-.1198	-.1408	-.0677	-.0292	-.0233	-.0114
60.000			.3958	-.1362	-.4938	-.4755	-.0041	.1718	.2352	-.1574	-.2505	-.0919	-.0280	-.0233	-.0036
90.000		.7810	.3337	-.1866	-.5246	-.1743	.0721	.2715	.4301	-.7052	-.1792	-.0799	-.0990	-.0494	
120.000			.2941	-.2269	-.5448	-.4095	.0212	.1434	.1535	-.2660	-.4043	-.1503	-.0760	-.0886	.0061
135.000								.1055		.0294	-.2203			-.1115	
150.000			.2893	-.2407	-.5635	-.2828	-.0411	.0852	.1397	.1874	-.1897	-.3296	-.2292	-.1956	-.0301
165.000				-.2373	-.5572	-.3913	-.0608	.5626	.1409	.2483	.1378	-.2959	-.1560	-.1258	.0071
180.000	1.0930	.7800	.2998	-.2308	-.5694	-.4442	-.0709	.0558	.1314	.2493	.2471	-.3951	-.1452	-.1377	.0056
270.000		.6906							.4096						
X/LT	.7460	.8330	.9280												

ALPHA( 8 ) = 4.030 BETA( 8 ) = 4.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0830	.9201	.4985	-.0353	-.4096	-.4580	-.0851	.0091	.0286	-.0867	-.1199	-.0659	-.0324	-.0102	-.0053
30.000			.4156	-.1071	-.4761	-.5333	-.0871	.0490	.0881	-.1075	-.1499	-.0689	-.0365	-.0285	-.0134
60.000			.3382	-.1857	-.5231	-.4628	.0018	.1739	.2420	-.3418	-.2390	-.0778	-.0327	-.0315	-.0080
90.000		.7306	.2808	-.2364	-.5581	-.1568	.0815	.2789	.4405	-.7307	-.1467	-.0780	-.0959	-.0472	
120.000			.2525	-.2698	-.5280	-.3243	.0336	.1570	.1727	-.2542	-.3803	-.1658	-.0996	-.0914	.0002
135.000								.1141		.0229	-.2255			-.1168	
150.000			.2625	-.2698	-.5695	-.2348	-.0340	.0918	.1529	.1748	-.2014	-.3740	-.2805	-.1891	-.0407
165.000				-.2481	-.5569	-.3250	-.0605	.0600	.1420	.2390	.1171	-.2962	-.1570	-.1332	-.0152
180.000	1.0830	.7591	.2947	-.2338	-.5479	-.4081	-.0733	.0448	.1233	.2388	.2415	-.4074	-.1607	-.1652	-.0118
270.000		.9436							.4064						
X/LT	.7460	.8330	.9280												

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-71.6 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK (R01731)

ALPHA( 8 ) = 4.030 BETA( 8 ) = 4.030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	.0085	-.0005	-.2369
30.000	.0073	-.0113	-.2399
60.000	.0168	.0356	-.1217
90.000	.0465	.0603	
120.000	.0927	.0733	.2900
135.000	.0932	.1062	.0849
150.000	.0481	.0603	.0149
165.000	.1015	.1304	.1935
180.000	.1039	.1407	.1756

ALPHA( 8 ) = 4.020 BETA( 9 ) = 6.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

.000	1.0590	.9031	.4869	-.0480	-.4118	-.4581	-.1670	-.0123	.0065	-.1025	-.1645	-.0813	-.0434	-.0368	-.0282
30.000			.3765	-.1122	-.5115	-.4829	-.0413	.0367	.0790	-.1015	-.1818	-.0736	-.0448	-.0378	-.0272
60.000			.2826	-.2417	-.5664	-.5308	.0289	.1808	.2548	-.3297	-.2238	-.0637	-.0450	-.0383	-.0165
90.000		.6739	.2256	-.2918	-.5912	-.1456	.0939	.2910	.4511	-.7474	-.1179	-.0794	-.0849	-.0326	
120.000			.2065	-.3125	-.5567	-.2599	.0404	.1724	.1901	-.2773	-.3721	-.1880	-.1324	-.1014	-.0134
135.000			.2229	-.3113	-.5908	-.2359	-.0315	.0929	.1575	.1622	-.2701	-.4460	-.2798	-.2124	-.0749
150.000				-.2714	-.5757	-.3512	-.0665	.0526	.1343	.2231	.0604	-.2959	-.1902	-.1621	-.0317
165.000				.2760	-.2437	-.5523	-.4989	.0261	.1059	.2148	.2077	-.3695	-.2201	-.1976	-.0594
180.000				.9812											
270.000															

X/LT .7460 .8530 .9280

PHI

.000	-.0156	-.0236	-.2308
30.000	-.0080	.0007	-.2234
60.000	.0028	.0174	-.1452
90.000	.0493	.0547	
120.000	.0764	.0774	.2455
135.000	.0774	.0995	.0734
150.000	.0774	.454	-.0014
165.000	.0774	.1095	.1929
180.000	.0774	.1090	.1813

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ARC11-716 1A14 01+112+512N25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 8 ) = 4.010 BETA( 10 ) = 0.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	1.0270	.8691	.4672	-.0637	-.4222	-.4728	-.2022	-.0472	-.0853	-.1115	-.1829	-.0998	-.0731	-.0594	-.0548
30.000			.3235	-.1946	-.5408	-.5327	-.0640	.0173	.0654	-.0920	-.2315	-.0812	-.0597	-.0567	-.0444
60.000			.2213	-.2937	-.5957	-.5454	.0464	.1827	.2641	-.3057	-.2051	-.0499	-.0552	-.0508	-.0375
90.000		.6141	.1703	-.3266	-.6304	-.1354	.0777	.2901	.4676	-.7710	-.0887	-.0757	-.0811	-.0380	
120.000			.1571	-.3333	-.6199	-.1481	.0381	.1791	.2143	-.3011	-.3493	-.2147	-.1658	-.1349	-.0448
135.000								.1205		.0011		-.2409		-.1895	
150.000			.1857	-.3264	-.6168	-.2494	-.0256	.0943	.1620	.1388	-.3384	-.4716	-.2894	-.2456	-.1015
165.000				-.2929	-.5986	-.4261	-.0715	.0394	.1261	.1964	.0649	-.3066	-.2313	-.2156	-.0837
180.000	1.0270	.6371	.2668	-.2531	-.5784	-.5330	-.0929	.0022	.0825	.1846	.1659	-.3745	-.2617	-.2569	-.1012
270.000		1.0300							.3956						
X/LT	.7460	.8530	.9280												

ALPHA( 8 ) = 4.000 BETA( 11 ) = 10.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	1.0270	.8691	.4672	-.0637	-.4222	-.4728	-.2022	-.0472	-.0853	-.1115	-.1829	-.0998	-.0731	-.0594	-.0548
30.000			.3235	-.1946	-.5408	-.5327	-.0640	.0173	.0654	-.0920	-.2315	-.0812	-.0597	-.0567	-.0444
60.000			.2213	-.2937	-.5957	-.5454	.0464	.1827	.2641	-.3057	-.2051	-.0499	-.0552	-.0508	-.0375
90.000		.6141	.1703	-.3266	-.6304	-.1354	.0777	.2901	.4676	-.7710	-.0887	-.0757	-.0811	-.0380	
120.000			.1571	-.3333	-.6199	-.1481	.0381	.1791	.2143	-.3011	-.3493	-.2147	-.1658	-.1349	-.0448
135.000								.1205		.0011		-.2409		-.1895	
150.000			.1857	-.3264	-.6168	-.2494	-.0256	.0943	.1620	.1388	-.3384	-.4716	-.2894	-.2456	-.1015
165.000				-.2929	-.5986	-.4261	-.0715	.0394	.1261	.1964	.0649	-.3066	-.2313	-.2156	-.0837
180.000	1.0270	.6371	.2668	-.2531	-.5784	-.5330	-.0929	.0022	.0825	.1846	.1659	-.3745	-.2617	-.2569	-.1012
270.000		1.0300							.3956						
X/LT	.7460	.8530	.9280												

ALPHA( 8 ) = 4.000 BETA( 11 ) = 10.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	1.0270	.8691	.4672	-.0637	-.4222	-.4728	-.2022	-.0472	-.0853	-.1115	-.1829	-.0998	-.0731	-.0594	-.0548
30.000			.3235	-.1946	-.5408	-.5327	-.0640	.0173	.0654	-.0920	-.2315	-.0812	-.0597	-.0567	-.0444
60.000			.2213	-.2937	-.5957	-.5454	.0464	.1827	.2641	-.3057	-.2051	-.0499	-.0552	-.0508	-.0375
90.000		.6141	.1703	-.3266	-.6304	-.1354	.0777	.2901	.4676	-.7710	-.0887	-.0757	-.0811	-.0380	
120.000			.1571	-.3333	-.6199	-.1481	.0381	.1791	.2143	-.3011	-.3493	-.2147	-.1658	-.1349	-.0448
135.000								.1205		.0011		-.2409		-.1895	
150.000			.1857	-.3264	-.6168	-.2494	-.0256	.0943	.1620	.1388	-.3384	-.4716	-.2894	-.2456	-.1015
165.000				-.2929	-.5986	-.4261	-.0715	.0394	.1261	.1964	.0649	-.3066	-.2313	-.2156	-.0837
180.000	1.0270	.6371	.2668	-.2531	-.5784	-.5330	-.0929	.0022	.0825	.1846	.1659	-.3745	-.2617	-.2569	-.1012
270.000		1.0300							.3956						
X/LT	.7460	.8530	.9280												

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAL14A - VOL. 9  
ARC11-716 IAL14 08+112+512N23+AT10 EXTERNAL TANK (R81731)

ALPHA( 8 ) = 4.000 BETAD (11) = 10.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .6530 .9280

PM1	
.000	-.0766
30.000	-.0443
60.000	-.0352
90.000	.0142
120.000	.0337
150.000	.0315
180.000	-.0073
210.000	.0077
240.000	-.0231
270.000	.0365

ALPHA( 9 ) = 6.000 BETAD ( 1 ) = -9.980

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6360

PM1	
.000	.9683
30.000	.6553
60.000	.7239
90.000	.6621
120.000	.9017
150.000	.3493
180.000	.9683
210.000	.3284
240.000	.7480
270.000	.9280

PM1	
.000	-.0736
30.000	.0039
60.000	.0669
90.000	.0626
120.000	.2073
150.000	.2232
180.000	.1647
210.000	.1693
240.000	.1266
270.000	.3295

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ARC11-716 1A14 Q1+712+512N25+AT10 EXTERNAL TANK

(RB1731)

ALPHA( 9) = 5.930 BETA( 2) = -7.960

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0130	.9147	.5218	-.0030	-.3763	-.4218	-.3342	-.0288	-.0542	-.0742	-.1229	-.0719	-.0564	-.0516	-.0480
30.000			.6434	.1176	-.2523	-.2815	-.1371	.0447	.0586	-.1437	-.0954	-.0329	-.0034	-.0107	-.0022
60.000			.6767	.1531	-.2034	-.1780	.0085	.1852	.2346	-.4215	-.1944	-.0182	.0907	.0419	.0358
90.000	1.0050		.6076	.0939	-.2434	-.1724	.0566	.2429	.3581	-.4945	-.1434	-.0139	-.0303	-.0188	
120.000			.4665	-.0483	-.3739	-.3154	-.1229	.0031	-.0270	-.1525	-.4840	-.0855	.1009	.0446	.0895
135.000								-.0417	.0220		-.1311			.0083	
150.000			.3426	-.1733	-.5038	-.4811	-.1579	-.0495	-.0232	.1909	.0619	-.1964	-.0972	-.1077	.0061
165.000				-.2475	-.5905	-.5249	-.0609	-.0302	.0510	.2285	.2031	-.1491	-.1055	-.1401	.0288
180.000	1.0130	.6882	.2202	-.2967	-.6035	-.4678	-.0917	.0151	.1112	.2370	.2215	-.3212	-.2169	-.1551	-.0155
270.000		.5951								.4347					

X/LT .7480 .8530 .9280

PHI

.000	-.0364	-.0499	-.2482
30.000	.0171	.0207	-.2104
60.000	.0885	.0936	-.0997
90.000	.0729	.0516	
120.000	.1938	.2003	.6107
135.000	.2082	.2297	.3737
150.000	.1612	.2361	.4201
165.000	.1776	.2463	.5161
180.000	.1362	.1955	.3287

ALPHA( 9) = 5.960 BETA( 3) = -5.960

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0420	.9534	.5474	.0225	-.3662	-.4142	-.2962	-.0049	.0295	-.0565	-.1021	-.0328	-.0301	-.0299	-.0223
30.000			.6311	.1002	-.2833	-.3069	-.1553	.0803	.0806	-.1335	-.0957	-.0274	-.0002	-.0024	.0032
60.000			.6299	.1007	-.2544	-.2216	-.0588	.1849	.2427	-.4026	-.2107	-.0291	.0353	.0267	.0308
90.000	.9561		.5461	.0315	-.3100	-.2039	.0459	.2419	.3597		-.5292	-.1709	-.0264	-.0629	-.0124
120.000			.4198	-.0994	-.4354	-.3178	-.1033	.0224	-.0085	-.1571	-.5043	-.1400	.0585	.0169	.0329
135.000								-.0174	.0227		-.1835			-.0179	
150.000			.3183	-.1975	-.5359	-.4696	-.1212	.0206	.0013	.1981	.0350	-.2213	-.1008	-.1185	.0018
165.000				-.2634	-.5782	-.5282	-.0672	.0028	.0719	.2320	.1890	-.1862	-.1141	-.1180	.0302
180.000	1.0420	.8895	.2245	-.3994	-.5928	-.3265	-.0863	.0498	.1219	.2369	.2218	-.3393	-.1795	-.1323	.0047
270.000		.6337													

X/LT .7480 .8530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(081731)

ARC11-716 1A14 Q1+T12+512N25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 5.960 BETA( 3 ) = -5.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8530 .9280

PHI  
.000 -.0028 -.0136 -.2160  
30.000 .0316 .0361 -.1906  
60.000 .0624 .0688 -.0512  
90.000 .0614 .0452  
120.000 .1761 .1800 .5619  
135.000 .1895 .2184 .3447  
150.000 .1510 .2287 .3758  
165.000 .1726 .2354 .4039  
180.000 .1422 .1984 .3182

ALPHA( 8 ) = 5.960 BETA( 4 ) = -3.970

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5590 .6360

PHI  
.000 1.0680 .9740 .5624 .0312 -.3552 -.4112 -.1275 .0114 .0523 -.0552 -.0934 -.0346 -.0255 -.0090 -.0029  
30.000 .5994 .0709 -.3186 -.3240 -.0549 .0620 .0963 -.1233 -.0939 -.0262 .0344 .0052 .0074  
60.000 .5730 .0460 -.3299 -.2380 -.0125 .1776 .2517 -.3657 -.2144 -.0480 .0345 .0142 .0136  
90.000 .9119 .4975 -.0223 -.3917 -.2029 .0440 .2395 .3680 -.5275 -.1820 -.0782 -.0506 -.0236  
120.000 .3874 .1329 -.1329 -.4840 -.2913 -.0775 .0509 .0208 -.1507 -.5080 -.1798 .0203 .0137 .0330  
135.000 .3100 .2136 -.2136 -.5466 -.4822 -.0913 .0169 .0371 .1914 .0034 -.2110 -.1137 -.1296 .0044  
150.000 .2614 .2614 -.5831 -.5222 -.0689 .0323 .0944 .2377 .1831 -.2135 -.1329 -.1086 .0306  
165.000 1.0620 .6912 .2362 .2699 -.6031 -.2906 -.0632 .1172 .2372 .2216 -.3707 -.1590 -.1279 .0044  
180.000 .7112 .4024

K/LT .7460 .8530 .9280

PHI  
.000 .0193 .0060 -.1896  
30.000 .0376 .0433 -.1724  
60.000 .0547 .0824 -.0766  
90.000 .0672 .0522  
120.000 .1587 .1798 .5113  
135.000 .1593 .2027 .3171  
150.000 .1456 .2044 .2975  
165.000 .1702 .2317 .4399  
180.000 .1466 .2063 .3145

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ARC11-716 IAI4 0A-712+312N25+AT10 EXTERNAL TANK (L81731)

ALPHA( 9 ) = 5.940 BETA( 5 ) = -1.960

## SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI														
0.00	1.0760	.9864	.5692	.0391	-.3548	-.4151	-.1113	.0274	-.0304	-.0780	-.0378	-.0109	.0051	.0084
30.000			.5765	.0440	-.3499	-.3901	-.0847	.0673	-.1068	-.0943	-.0469	-.0025	.0036	.130
60.000			.5250	-.0028	-.3889	-.2831	-.0164	.1780	.2574	-.2155	-.0706	.0214	.0017	.1145
90.000			.4362	-.0766	-.4478	-.1992	.0463	.2482	.3763	-.5233	-.2507	.0345	-.0827	-.0288
120.000			.3484	-.1685	-.5159	-.2873	-.0490	.0703	.0510	-.1557	-.2104	-.0064	-.0361	.0266
150.000							.0468	.0468	.0468	.0413	-.2593		-.0365	
180.000			.2904	-.2311	-.5471	-.4990	-.0468	.0434	.0674	-.0366	-.2062	-.1255	-.1372	-.0086
195.000				-.2668	-.5003	-.3879	-.0610	.0476	.1139	.1777	-.2780	-.1468	-.1172	.0305
165.000	1.0760	.8944	.2413	-.2903	-.5893	-.2631	-.0344	.0324	.1238	.2440	-.2343	-.1395	-.1030	.0148
270.000		.7626												.3952

K/LT .7460 .8330 .9280

PMI														
.000	.0283	.0221	-.1793											
30.000	.0356	.0426	-.1697											
60.000	.0488	.0740	-.0811											
90.000	.0717	.0800												
120.000	.1442	.1543	.4180											
150.000	.1493	.1873	.2333											
180.000	.1161	.1810	.2272											
165.000	.1901	.2093	.4040											
195.000	.1908	.1893	.2913											

ALPHA( 9 ) = 5.940 BETA( 6 ) = .040

## SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI														
.000	1.0760	.9926	.5716	.0347	-.3589	-.4121	-.1080	.0355	-.0493	-.0905	-.0408	-.0063	.0040	.0188
30.000			.5400	.0052	-.3951	-.4376	-.0875	.0656	-.0902	-.1178	-.0487	-.0090	-.0063	.0081
60.000			.4704	-.0523	-.4379	-.4548	-.0093	.1783	.2801	-.2121	-.0823	.0062	.0013	.0045
90.000			.3783	-.1393	-.4934	-.2385	.0321	.2536	.3843	-.5948	-.1909	-.0873	-.0741	-.0231
120.000			.2732	-.2132	-.5387	-.2664	-.0218	.0904	.0774	-.1345	-.2270	-.0433	-.0495	.0240
150.000							.0701	.0701	.0701	.0583	-.2485		-.0882	
180.000			.2637	-.2603	-.5685	-.5038	-.0343	.0615	.0995	.1871	-.1094	-.1898	-.1535	-.0348
165.000	1.0760	.8864	.2447	-.2672	-.5835	-.3757	-.0993	.0532	.1300	.2331	.1637	-.1888	-.1203	.0187
195.000		.8214						.1329	.2526	.2436	-.3868	-.1378	-.0856	.0270
270.000														.3835

K/LT .7460 .8330 .9280

PMI														
-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--



ARC1:-7:6 1A14 D-712-S12025-AT10 EXTERNAL TANK (R01731)

ALMAZ 91 = 16 10 04 37 00  
 5.840 0430 0430 0430 0430  
 0430 0430 0430 0430 0430

SECTION ( : INTERNAL TANK

[illegible]

ALPHA 9) = 5.040 05.10 ( 7) = 2.300

SECT: 20 : 1) EXTERNAL TASK

W/L	.0000	.0080	.0160	.1130	.1780	.1940	.2130	.2420	.2730	.3440	.4310	.5050	.5360	.6360
PM1														
.000	1.0723	.9866	.5661	.0303	-.3615	-.4074	-.0751	.0306	.0608	-.0341	-.0405	-.0090	.0003	.0185
30.000			.5017	-.0250	-.4154	-.4710	-.0909	.0565	.1043	-.0847	-.1201	-.0464	-.0002	.0029
60.000			.4067	-.1198	-.4653	-.5166	-.0079	.1747	.2701	-.0091	-.1667	-.0102	-.0152	-.0020
90.000	.7632		.3217	-.1947	-.5356	-.2504	.0397	.2637	.3934	-.6077	.1645	-.0930	-.0773	-.0195
120.000			.2003	-.2567	-.5761	-.2574	.0022	.1112	.1033	-.2505	-.1961	-.0750	-.0756	.0145
135.000								.0936		.0454	-.2553		-.0689	
30.000		.2360	-.2621	-.5930	-.3659	-.0364	-.0364	.0774	.1160	.1728	-.1983	-.2101	-.1701	-.0177
60.000			-.2502	-.5974	-.3609	-.0350	-.0350	.0595	.1303	.2419	.3356	-.1919	-.1061	.0140
180.000	1.0780	.6948	-.2432	-.2695	-.5841	-.3365	-.0660	.0522	.1259	.2393	.2378	-.4000	-.1559	.0094
270.000	.8702							.3760						

Year	1967	1968	1969	1970
1967	100.000	100.000	100.000	100.000
1968	100.000	100.000	100.000	100.000
1969	100.000	100.000	100.000	100.000
1970	100.000	100.000	100.000	100.000



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-16 1A14 Q1-T12+S12N25+AT10 EXTERNAL TANK (RB1731)

ALPHA( 9 ) = 5.990 BETA( 8 ) = 4.073

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI	.0000	1.0650	.9672	.5909	.0192	-.3662	-.4169	-.1937	.0191	.0479	-.0605	-.1028	-.0418	-.0206	-.0135
30.000				.4557	-.0616	-.4523	-.4983	-.0491	.0461	.1904	-.0804	-.1233	-.0366	-.0276	-.0175
60.000				.3513	-.1722	-.5243	-.5777	-.0100	.1707	.2665	-.2871	-.1196	-.0616	-.0229	-.0311
90.000			.7105	.2678	-.2518	-.5753	-.2258	.0683	.2693	.4015		-.6113	-.1167	-.1006	-.0799
120.000				.3189	-.2978	-.6071	-.2232	.0226	.1290	.1256	-.2400	-.4543	-.1976	-.0969	-.0821
135.000								.1072		.0150		-.2242		-.1094	
150.000				.2163	-.3162	-.6042	-.2399	-.0324	.0837	.1367	.1997	-.2317	-.3629	-.2417	-.0294
165.000					-.2999	-.6055	-.3349	-.0562	.1314	.2266	.1077	-.3043	-.1474	-.1208	-.0147
180.000	1.0650	.7001	.33	-.2861	-.5896	-.4553	-.0771	.0421	.1135	.2195	.2520	-.4165	-.1424	-.1458	-.0113
270.000		.5245							.3710						

X/LT .7460 .8530 .9280

PHI

.000	.0171	.0066	-.1949
30.000	.0149	.0182	-.1998
60.000	.0156	.0292	-.1432
90.000	.0371	.0253	
120.000	.0995	.0949	.2697
135.000	.1022	.1163	.0817
150.000	.0382	.0699	.0161
165.000	.1077	.1411	.1909
180.000	.1131	.1553	.1772

ALPHA( 9 ) = 5.990 BETA( 9 ) = 6.100

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI	.0000	1.0360	.9516	.5407	.0143	-.3515	-.4039	-.2417	-.0061	.0228	-.0735	-.1100	-.0543	-.0353	-.0260
30.000				.4118	-.1100	-.4789	-.4911	-.1810	.0299	.0864	-.0765	-.1458	-.0538	-.0388	-.0379
60.000				.2917	-.2287	-.5698	-.5254	.0292	.1730	.2809	-.2694	-.1350	-.0053	-.0306	-.0275
90.000		.6519	.2200	-.3024	-.6062	-.1767	.0629	.2706	.4157	.4157	-.5695	-.0425	-.0844	-.0770	-.0167
120.000			.1756	-.3270	-.6377	-.1607	.0324	.1439	.1478	-.2729	-.4301	-.2209	-.1251	-.1008	-.0016
135.000								.1113		.0084		-.2258		-.1387	
150.000			.1819	-.3275	-.6368	-.2286	-.0262	.0886	.1419	.1480	-.2689	-.4233	-.2621	-.1982	-.0725
165.000				-.3176	-.6217	-.3413	-.0603	.0522	.1229	.2110	.0843	-.3115	-.1787	-.1515	-.0430
180.000	1.0360	.6834	.2232	-.2940	-.5967	-.5060	-.0819	.0238	.0963	.2022	.2008	-.3673	-.1861	-.1776	-.0351
270.000		.9529							.3673						

X/LT .7460 .8530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T112+S12N25+AT110 EXTERNAL TANK (881731)

ALPHA( 9 ) = 5.990 BETA( 9 ) = 6.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI	CP
.000	-.0065
30.000	-.0126
60.000	-.0187
90.000	-.0248
120.000	-.0309
150.000	-.0370
180.000	-.0431

ALPHA( 9 ) = 6.020 BETA( 10 ) = 6.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6360

PHI	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP	CP
.000	1.0030	.9126	.5172	.0005	-.3567	-.4195	-.2137	-.0437	-.0074	-.0882	-.1332	-.0753	-.0597	-.0465
30.000			.3569	-.1540	-.5141	-.5414	-.2670	.0012	.0640	-.0738	-.1673	-.0614	-.0590	-.0510
60.000			.2258	-.2800	-.6003	-.5453	.0308	.1724	.2837	-.2466	-.1150	.0027	-.0308	-.0350
90.000	.9902		.1593	-.3492	-.6407	-.1441	.0741	.2729	.4277	-.4277	-.5110	.0042	-.0748	-.0195
120.000			.1283	-.3463	-.5680	-.1185	.0433	.1515	.1635	-.2695	-.4028	-.2572	-.1534	-.0323
150.000			.1424	-.3527	-.6420	-.2030	-.0277	.0863	.1475	.1372	-.3110	-.4682	-.2793	-.0900
180.000				-.3334	-.6235	-.3308	-.0674	.0428	.1189	.1947	.0617	-.2977	-.2083	-.0780
	1.0030	.5697	.2151	-.2968	-.6129	-.5962	-.0939	.0007	.0572	.1745	.1609	-.3532	-.2330	-.0878
		1.0100							.3611					

X/LT .7460 .8530 .9280

PHI	CP
.000	-.0362
30.000	-.0286
60.000	-.0081
90.000	.0362
120.000	.0674
150.000	.0611
180.000	.0105

ARC11-716 1A14 01-T12-S12N25+AT10 EXTERNAL TANK (R81731)

ALPHA( 9 ) = 5.990 BETA( 11 ) = 10.150

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	.9632	.8630	.4867	-.0181	-.3814	-.4423	-.2956	-.0822	-.0463	-.1113	-.1457	-.1102	-.0900	-.0909	-.9834
30.000			.2984	-.2033	-.5514	-.6081	-.1943	-.0300	.0456	-.0804	-.1847	-.0895	-.0775	-.0805	-.0689
60.000			.1671	-.3346	-.6418	-.5769	.0083	.1528	.2819	-.2283	-.1309	-.0142	-.0477	-.0538	-.0463
90.000		.5289	.1066	-.3676	-.6531	-.1089	.0377	.2512	.4424	-.4408	.0281	-.0395	-.0748	-.0362	
120.000			.0839	-.3881	-.6444	-.1097	.0298	.1390	.1745	-.2628	-.3878	-.2652	-.1820	-.0656	
135.000							.0928			-.0104		-.2620		-.2083	
150.000			.1078	-.3927	-.6573	-.1802	-.0263	.0832	.1403	.1142	-.3575	-.4563	-.3020	-.2579	-.1232
165.000				-.3584	-.6486	-.3310	-.0751	.0324	.0981	.1616	.0256	-.3102	-.2531	-.2545	-.1053
180.000	.9632	.5016	.2033	-.3192	-.6110	-.6384	-.1028	-.0117	.0231	.1345	.1116	-.3445	-.3353	-.2958	-.1340
270.000		1.0490							.3629						
X/LT	.7460	.8530	.9280												

ALPHA(10) = 8.090 BETA( 1 ) = -9.970

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	-.0730	-.0896	-.2956												
30.000	-.0499	-.0482	-.2507												
60.000	-.0157	-.0206	-.1573												
90.000	.0191	.0335													
120.000	.0441	.0637	.3012												
135.000	.0389	.0845	.0875												
150.000	-.0023	.0210	-.0468												
165.000	.0147	.0621	.1716												
180.000	-.0156	.0383	.1395												
X/LT	.7460	.8530	.9280												

ALPHA(10) = 8.090 BETA( 1 ) = -9.970

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	.9368	.9036	.5384	.0343	-.3343	-.3837	-.3223	-.0693	-.0254	-.0735	-.1162	-.0913	-.0693	-.0636	-.0688
30.000			.7066	.1966	-.1719	-.2022	-.1126	.0521	.0708	-.0928	-.0809	-.0219	.0131	.0112	.0134
60.000			.7503	.2378	-.1156	-.1087	.0382	.2130	.2647	-.3961	-.1890	-.0017	.0891	.0749	.0692
90.000		1.0130	.6454	.1442	-.1896	-.1462	.0506	.2252	.3073	-.4240	-.1445	.0644	.0310	.0310	.0428
120.000			.4538	-.0438	-.3693	-.3320	-.1950	-.0818	-.1241	-.1339	-.3939	-.0985	.1186	.0849	.0864
135.000								-.1225		.0043		-.1264		.0643	
150.000			.2900	-.2119	-.5216	-.5119	-.2677	-.1264	-.0005	.1697	-.0303	-.1902	-.0636	-.0737	.0190
165.000				-.3053	-.6130	-.5864	-.1518	-.0823	.0112	.1902	.1636	-.0960	-.0732	-.1193	.0319
180.000	.9368	.6053	.1394	-.3603	-.6045	-.5479	-.1066	-.0067	.0902	.2131	.1863	-.3219	-.1942	-.1646	-.0407
270.000		.4974							.4040						
X/LT	.7460	.8530	.9280												

PHI



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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (R81731)

ALPHA(10) = 8.050 BETA( 1) = -9.970

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.300	-.0382	-.0734	-.2398
30.000	.0310	.0237	-.2049
60.000	.0994	.1181	-.0753
90.000	.1358	.1671	
120.000	.1925	.2022	.5402
135.000	.2211	.2473	.3669
150.000	.1573	.2304	.4352
165.000	.1659	.2335	.5047
180.000	.1208	.1823	.3054

ALPHA(10) = 8.000 BETA( 2) = -7.950

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	.9835	.9535	.5746	.0395	-.3202	-.3695	-.2860	-.0224	.0136	-.5457	-.0885	-.0600	-.0359	-.0351	-.0301
30.000			.6905	.1685	-.2032	-.2261	.1397	.0712	.0919	-.0752	-.0723	-.0184	.0205	.0183	.0256
60.000			.6963	.1777	-.1753	-.1531	.0188	.2053	.2700	-.3685	-.1727	.0201	.0761	.0680	.0633
90.000		.9896	.5854	.0773	-.2559	-.1853	.0384	.2195	.3045	-.4556	-.2256	.0356	.0242	.0362	
120.000			.4110	-.0899	-.4108	-.3440	-.1731	-.0540	-.1046	-.1334	-.3919	-.1550	.0961	.0650	.0696
135.000								-.0901		.0135		-.2098		.0413	
150.000			.2794	-.2300	-.5423	-.5073	-.1999	-.0864	-.0585	.1833	-.0073	-.2184	-.0529	-.0801	.0134
165.000				-.3034	-.6154	-.5655	-.1095	-.0396	.0461	.2080	.1674	-.1488	-.0753	-.1133	.0391
180.000	.9835	.6273	.1624	-.3479	-.6280	-.4100	-.1027	.0215	.1104	.2251	.1998	-.3489	-.1867	-.1273	-.0001
270.000		.5653							.3801						

X/LT .7480 .8530 .9280

PMI

.300	-.0176	-.0352	-.2200
30.000	.0425	.0475	-.1620
60.000	.0699	.1194	-.0549
90.000	.1309	.1592	
120.000	.1747	.2220	.4785
135.000	.1967	.2308	.3201
150.000	.1454	.2163	.5814
165.000	.1651	.2282	.4562
180.000	.1319	.1875	.2831

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ARC11-716 1A14 OI+TI2+S12N23+AT10 EXTERNAL TANK (RB1731)

ALPHA(10) = 7.980 BETA( 3) = -5.950

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0110	.9911	.5985	.0749	-.3073	-.3594	-.2474	.0033	.0455	-.0303	-.0680	-.0378	-.0148	-.0120
30.000				.6728	-.1433	-.2373	-.2491	-.1465	.0804	.1111	-.0760	-.0695	-.0219	.0171	.0210
60.000				.6448	.1245	-.2409	-.2023	.0001	.2022	.2738	-.3506	-.1819	-.0452	.0457	.0531
90.000			.9192	.5266	.0144	-.3245	-.2209	.0278	.2184	.3061	-.4470	-.2752	-.0035	.0009	.0207
120.000				.3679	-.1323	-.4723	-.3483	-.1429	-.0369	-.0794	-.1569	-.4020	-.1951	.0712	.0506
135.000								-.0588	.0282			-.2527		.0190	
150.000				.2566	-.2540	-.5724	-.5076	-.1591	-.0524	-.0256	.1833	-.0041	-.0704	-.0909	.0115
165.000					-.3112	-.5995	-.5443	-.0664	-.0045	.0634	.2175	.1618	-.0874	-.0877	.0418
180.000		1.0110	.6253	.1679	-.3470	-.6170	-.2719	-.0985	.0533	.1191	.2297	.2126	-.3691	-.1597	.0137
270.000			.6224						.3591						

X/LT .7480 .8530 .9280

## PHI

.000	.0075	-.0012	-.1916
.71.000	.0513	.0555	-.1494
80.000	.0810	.1111	-.0470
90.000	.1223	.1755	
120.000	.1642	.2204	.4553
135.000	.1793	.2240	.2893
150.000	.1454	.2074	.3155
165.000	.1665	.2221	.4298
180.000	.1434	.1917	.2893

ALPHA(10) = 7.940 BETA( 4) = -3.970

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0380	1.0110	.6144	.0837	-.2974	-.3477	-.1317	.0229	.0653	-.0153	-.0349	-.0275	-.0041	.0023
30.000				.6462	.1170	-.2677	-.2838	-.0930	.0775	.1169	-.0651	-.0771	-.0220	.0150	.0153
60.000				.5906	.0651	-.2981	-.2422	-.0142	.1875	.2756	-.3273	-.1831	-.0434	.0388	.0406
90.000		.8776		.4712	-.0447	-.3963	-.2424	.0236	.2170	.3109	-.4609	-.2973	-.0493	-.0859	-.0002
120.000				.3350	-.1781	-.5101	-.3368	-.1153	-.0063	-.0486	-.1375	-.4264	-.2110	.0302	.0116
135.000								-.0231		.0352		-.2760		.0018	
150.000				.2456	-.2751	-.5829	-.5093	-.1195	-.0174	.0131	.1925	-.0110	-.2393	-.1087	.0045
165.000					-.3149	-.6082	-.5015	-.0685	.0180	.0853	.2235	.1606	-.2229	-.1094	.0607
180.000		1.0320	.6325	.1776	-.3412	-.6248	-.2315	-.0635	.0398	.1078	.2235	.2172	-.3789	-.1404	.0008
270.000			.6763						.3494						

X/LT .7480 .8530 .9280

## PHI

.000	.0075	-.0012	-.1916
.71.000	.0513	.0555	-.1494
80.000	.0810	.1111	-.0470
90.000	.1223	.1755	
120.000	.1642	.2204	.4553
135.000	.1793	.2240	.2893
150.000	.1454	.2074	.3155
165.000	.1665	.2221	.4298
180.000	.1434	.1917	.2893



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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 Q1+T12+S12N25+AT10 EXTERNAL TANK (081731)

ALPHA(10) = 7.940 BETA(4) = -3.970

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI	
.000	.0239 .0190 -.1740
30.000	.0518 .0969 -.1436
60.000	.0670 .1000 -.0469
90.000	.1113 .1711
120.000	.1515 .2037 .3999
135.000	.1660 .2033 .2515
150.000	.1401 .969 .2404
165.000	.1635 .2267 .3962
180.000	.1487 .1952 .2960

ALPHA(10) = 7.940 BETA(5) = -1.980

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI	
.000	1.0430 1.0270 .6201 .0931 -.2970 -.3511 -.1181 .0333 .0782 -.0095 -.0455 -.0121 .0043 .0109 .0195
30.000	.6182 .0860 -.3002 -.3348 -.0867 .0733 .1248 -.0633 -.0723 -.0262 .0015 .0109 .0195
60.000	.5354 .0113 -.3579 -.2831 -.0193 .1818 .2816 -.3071 -.1825 .0068 .0189 .0246 .0293
90.000	.8301 .4134 -.1020 -.4610 -.2239 .0259 .2214 .3179 .4762 .1899 .0756 .0450 .0143
120.000	.2926 -.2149 -.5487 -.2831 -.0878 .0175 .0162 .0175 .1395 .4983 .2127 .0014 .0079 .0194
135.000	.2298 -.2874 -.9950 -.5296 -.0833 .0133 .0433 .1907 .0624 .2422 .1127 .1141 .0031
150.000	.3165 .6213 .2997 .0683 .0349 .1030 .2287 .1696 .2781 .1207 .0756 .0339
165.000	1.0430 .6348 .1813 .3355 .6162 .2346 .0544 .0443 .3387
180.000	.7288

X/LT .7460 .8530 .9280

PMI	
.000	.0388 .0311 -.1678
30.000	.0469 .0550 -.1468
60.000	.0599 .0911 -.0886
90.000	.0997 .1519
120.000	.1397 .1888 .3578
135.000	.1519 .1934 .2225
150.000	.1211 .1707 .1902
165.000	.1538 .2038 .4087
180.000	.1360 .1168 .3157

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DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK

(RB1731)

ALPHAO(10) = 7.090 BETA0 ( 6 ) = .030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0490	1.0290	.6218	.0956	-.2925	-.3548	-.1091	.0413	.0825	-.0027	-.0230	.0047	.0142	.0226
30.000				.5786	.0906	-.3353	-.3786	-.0948	.0668	.1234	-.0466	-.0543	-.0102	.0022	.0126
60.000				.4735	-.0470	-.4117	-.3796	-.0214	.1748	.2879	-.2760	-.0923	-.0034	.0071	.0057
90.000			.7797	.3550	-.1577	-.5042	-.2164	.0322	.2259	.3254	-.5054	-.1022	-.0332	-.0486	-.0075
120.000				.2578	-.2536	-.5733	-.2619	-.0570	.0444	.0137	-.1865	-.5296	-.1921	-.0296	.0280
135.000								.0373	.0402	.0255	.0255	-.2345	-.0543		
150.000				.2114	-.3041	-.5983	-.5039	-.0558	.0476	.0736	.1676	-.1398	-.2511	-.1529	-.0326
165.000					-.3242	-.6144	-.2959	-.0644	.1165	.2306	.1591	-.3082	-.1546	-.0999	.0253
180.000	1.0490	.6348		.1908	-.3310	-.6190	-.2648	-.0676	.1219	.2409	.2472	-.3816	-.1234	-.0656	.0380
270.000		.7892							.3311						
X/LT	.7460	.8530	.9280												

PHI

.000	.0405	.0355	-.1647
30.000	.0400	.0466	-.1733
60.000	.0387	.0690	-.1065
90.000	.0721	.0571	
120.000	.1300	.1506	.3638
135.000	.1334	.1588	.1832
150.000	.1049	.1546	.1744
165.000	.1334	.1735	.2017
180.000	.1396	.1746	.1422

ALPHAO(10) = 7.940 BETA0 ( 7 ) = 2.060

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.0440	1.0250	.6183	.0880	-.3097	-.3471	-.1908	.0410	.0785	-.0167	-.0484	.0078	.0101	.0237
30.000				.5387	.0132	-.3791	-.4280	-.1081	.0567	.1174	-.0512	-.0830	-.0221	-.0100	.0080
60.000				.4145	-.1073	-.4771	-.4998	-.0308	.1676	.2619	-.2512	-.1033	.0048	.0063	.0029
90.000		.7242		.2980	-.2153	-.5543	-.2642	.0420	.2363	.3383	-.4990	-.0742	-.0636	-.0567	.0010
120.000				.2199	-.2921	-.6026	-.2323	-.0305	.0731	.0456	-.1819	-.5195	-.2092	-.0601	.0191
135.000								.0615	.0536	.0536	.0536	-.2378	-.0722		
150.000				.1873	-.3296	-.6237	-.3024	-.0398	.0625	.1003	.1703	-.1828	-.3101	-.1978	-.0200
165.000					-.3264	-.6121	-.2763	-.0585	.1242	.2293	.1311	-.2857	-.1311	-.0882	.0211
180.000	1.0440	.6332		.1863	-.3284	-.6236	-.3006	-.0712	.1154	.2274	.2352	-.4022	-.1199	-.0759	.0157
270.000		.8445							.3252						
X/LT	.7460	.8530	.9280												

PHI

.000	.0405	.0355	-.1647
30.000	.0400	.0466	-.1733
60.000	.0387	.0690	-.1065
90.000	.0721	.0571	
120.000	.1300	.1506	.3638
135.000	.1334	.1588	.1832
150.000	.1049	.1546	.1744
165.000	.1334	.1735	.2017
180.000	.1396	.1746	.1422

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TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4559

(RB1731)

ARC11-716 IA14 CR+T12+S12M3+AT10 EXTERNAL TANK

ALPHA(10) = 7.940 BETA( 7) = 2.060

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI

.000	.0363	.0340	-.1591
30.000	.0333	.0418	-.1720
60.000	.0333	.0533	-.1201
90.000	.0490	.0279	
120.000	.1235	.1328	.3027
135.000	.1193	.1372	.1225
150.000	.1078	.1198	.0577
165.000	.1208	.1657	.2391
180.000	.1323	.1709	.1608

ALPHA(10) = 8.010 BETA( 8) = 4.090

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.0300	1.0070	.6045	.0764	-.3069	-.3532	-.2335	.0239	.0631	-.0280	-.0668	-.0345	-.0036	.0032	.0091
30.000			.4899	-.0269	-.4089	-.4446	-.1477	.0367	.1050	-.0553	-.1085	-.0372	-.0234	-.0209	-.0103
60.000			.3518	-.1629	-.5259	-.4922	.3010	.1598	.2910	-.2395	-.1006	.0079	-.0076	-.0160	-.0125
90.000		.6680	.2401	-.2681	-.5931	-.2257	.0387	.2386	.3440		-.4804	-.0363	-.0495	-.0571	-.0014
120.000			.1731	-.3346	-.6306	-.1770	-.0130	.0872	.0690	-.1834	-.4953	-.2168	-.0948	-.0695	.0141
135.000								.0774		.0293		-.2372		-.0903	
150.000			.1593	-.3569	-.6328	-.1938	-.0409	.0695	.1115	.1555	-.2315	-.3474	-.2242	-.1709	-.0433
165.000				-.3459	-.6326	-.2277	-.0639	.0468	.1174	.2220	.1106	-.2847	-.1353	-.1044	-.0108
180.000	1.0330	.6361	.1738	-.3366	-.6318	-.2591	-.0881	.0338	.1030	.2131	.2276	-.3760	-.1209	-.1140	-.0123
270.000		.8942													

X/LT .7460 .6530 .9280

PHI

.000	.0273	.0173	-.1789
30.000	.0175	.0205	-.1931
60.000	.0158	.0313	-.1454
90.000	.0453	.0217	
120.000	.1056	.1115	.2351
135.000	.0953	.1166	.0706
150.000	.0417	.0747	.0163
165.000	.1073	.1382	.1937
180.000	.1036	.1384	.1732

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ARC11-716 IA14 01+T12+S12N23+AT10 EXTERNAL TANK (R81T31)

ALPHA0(10) = 8.000 BETA0 (9) = 6.120

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	1.0070	.9912	.9997	.0705	-.3130	-.3610	-.2456	.0090	.0396	-.0405	-.0862	-.0445	-.0175	-.0124	-.0053
30.000			.4465	-.0697	-.4543	-.4970	-.3709	.0175	.0686	-.0550	-.1349	-.0543	-.0359	-.0349	-.0319
60.000			.2955	-.2215	-.5690	-.5270	.0101	.1652	.2986	-.2071	-.1257	.0013	-.0024	-.0174	-.0126
90.000		.6148	.1915	-.3187	-.6330	-.2197	.0449	.2582	.3624	-.4846	-.0190	-.0312	-.0442	.0013	
120.000			.1366	-.3580	-.6645	-.1734	.0048	.1147	.1042	-.1834	-.4824	-.2219	-.1120	-.0808	-.0022
150.000								.1027	.0297	.0297	-.2453	-.2453	-.1198		
180.000			.1366	-.3438	-.6589	-.2105	-.0382	.0824	.1330	.1457	-.2625	-.3778	-.2476	-.1921	-.0684
210.000				-.3518	-.6548	-.2684	-.0590	.0536	.1201	.2111	.0846	-.3106	-.1555	-.1286	-.0394
270.000			.1644	-.3418	-.6296	-.3823	-.0877	.0225	.0956	.1908	.1940	-.3427	-.1540	-.1500	-.0532
X/LT	.7460	.8550	.9280												

PHI															
.000	.0064	-.0015	-.1906												
30.000	-.0066	.0027	-.1980												
60.000	.0125	.0344	-.1363												
90.000	.0475	.0403													
120.000	.0917	.1014	.2011												
150.000	.0827	.1085	.0623												
180.000	.0379	.0514	.0076												
210.000	.0905	.1204	.1977												
270.000	.0578	.1140	.1626												

ALPHA0(10) = 7.980 BETA0 (10) = 6.120

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	.9736	.9510	.9701	.0588	-.3279	-.3719	-.2038	-.0368	.0098	-.0613	-.0983	-.0756	-.0445	-.0357	-.0388
30.000			.3850	-.1216	-.4909	-.5355	-.4001	-.0183	.0628	-.0616	-.1582	-.0848	-.0880	-.0385	-.0344
60.000			.2247	-.2777	-.6100	-.5495	-.0048	.1988	.2993	-.1914	-.1302	-.0183	-.0115	-.0161	-.0128
90.000		.5944	.1336	-.3683	-.6643	-.1707	.0412	.2637	.3778	-.4772	.0007	-.0310	-.0389	-.0182	
120.000			.0961	-.3811	-.6804	-.1267	.0129	.1313	.1313	-.1718	-.4715	-.2285	-.1386	-.1191	-.0311
150.000								.1126	.0271	.0271	-.2478	-.2478	-.1710		
180.000			.1042	-.3848	-.6765	-.1907	-.0316	.0874	.1348	.1402	-.2874	-.4300	-.2588	-.2140	-.0818
210.000				-.3818	-.6541	-.2649	-.0629	.0481	.1081	.1867	.0556	-.0884	-.1800	-.1794	-.0688
270.000		.9003	.9019	-.3589	-.6448	-.5342	-.0924	.0098	.0549	.1602	.1413	-.3252	-.1973	-.2890	-.0848
X/LT	.7460	.8550	.9280												

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1731)

ARC11-716 1A14 04+112+S.2425+AT10 EXTERNAL TANK

ALPHA3(10) = 7.980 BETA0(10) = 0.120

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C1

K/LT .7460 .6530 .9260

PHI  
 .000 -.0227 -.0358 -.2233  
 30.000 -.0303 -.0254 -.2171  
 60.000 .0084 .0285 -.1272  
 90.000 .0442 .0506  
 120.000 .0763 .0979 .2224  
 150.000 .0677 .0979 .0590  
 180.000 .0093 .0442 -.0178  
 210.000 .0506 .0942 .1788  
 240.000 .0300 .0797 .1461

ALPHA3(10) = 7.990 BETA0(11) = 10.200

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C1

K/LT .0000 .0060 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .4310 .5030 .5380  
 PHI  
 .000 .9364 .9045 .5397 .0343 -.3290 -.3885 -.2805 -.0798 -.0317 -.0922 -.1286 -.1037 -.0841 -.0618 -.0727  
 30.000 .3323 -.1583 -.5284 -.5910 -.2345 -.0501 .0376 -.0518 -.1199 -.1348 -.0997 -.1049 -.0949  
 60.000 .1645 -.3336 -.6488 -.5902 -.0125 .1504 .2539 -.1548 -.1617 -.0696 -.0345 -.0288 -.0237  
 90.000 .0813 -.4049 -.6680 -.1539 .0199 .2591 .3858 -.4797 -.3006 -.1537 -.1521 -.1383  
 120.000 .0339 -.4293 -.5143 -.0394 .0267 .1137 .1475 -.1283 -.1452 -.1576 -.1425 -.0669  
 150.000 .0656 -.4236 -.6655 -.1663 -.0365 .0780 .1016 .0328  
 180.000 .3693 -.6733 -.2594 -.0722 .0346 .1038 .1605 .1277 .1277 .1277 .1277 .1277  
 210.000 .9364 .4363 .1422 .3591 .5475 .6420 .6997 .6997 .6997 .6997 .6997 .6997  
 240.000 1.0250

K/LT .7460 .6530 .9260

PHI  
 .000 -.0615 -.0796 -.0705  
 30.000 -.0719 -.0610 -.2388  
 60.000 .0045 .0225 -.1173  
 90.000 .0073 .0599  
 120.000 .0565 .0615 .2420  
 150.000 .0560 .0972 .0718  
 180.000 .0160 .0354 .0347  
 210.000 .0283 .0718 .1709  
 240.000 .0003 .0379 .1375

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ARC11-716 1A14 0L+T12+S12N25+AT1D EXTERNAL TANK (R81731)

ALPHA(11) = 9.990 BETA(1) = -9.930

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PMI															
.000	.9028	.9416	.9949	.0861	-.2754	-.3330	-.2668	-.0567	-.0030	-.0352	-.0700	-.0784	-.0823	-.0584	-.0589
30.000	.7564	.2530	-.1227	-.1619	-.0795	-.0871	.1093	-.0283	-.0068	.0175	.0246	.0232	.0338	.0232	.0338
60.000	.7686	.2618	-.0854	-.0906	.0544	.2337	.3011	-.3208	-.0307	.0580	.0805	.0808	.0807	.0808	.0807
90.000	.9801	.6221	.1276	-.1958	-.1624	.0427	.1971	.2463	-.3644	-.0789	.0523	.0526	.0682	.0526	.0682
120.000	.3925	-.0922	-.4037	-.3667	-.2517	-.1603	-.2147	-.1939	-.4367	-.0998	.1033	.0846	.0821	.0846	.0821
150.000									-.0470	-.1003	.0773			.0773	
180.000	.2222	-.2696	-.5685	-.5531	-.3707	-.1708	-.1355	.1411	-.0793	-.1829	-.0438	-.0547	.0180	-.0547	.0180
165.000									-.3585	-.6530	-.5627	-.1748	.0151	.1714	.1304
180.000	.9026	.5488	.0859	-.4023	-.6293	-.4612	-.1212	-.0730	.0914	.1838	.1684	-.3277	-.1925	-.1288	-.0230
270.000	.4641														.3349
K/LT	.7460	.8530	.9280												

K/LT .7460 .8530 .9280

PMI

.000	-.0449	-.0628	-.2532												
30.000	.0530	.0471	-.1864												
60.000	.1099	.1367	-.0870												
90.000	.1432	.1272													
120.000	.1903	.1742	.5474												
150.000	.2240	.2611	.3651												
180.000	.1637	.2440	.4025												
165.000	.1780	.2341	.3172												
180.000	.1346	.1745	.3047												

ALPHA(11) = 10.010 BETA(2) = -7.910

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PMI															
.000	.9469	.9922	.6237	.1093	-.2657	-.3138	-.2333	-.0105	.0391	-.0101	-.0477	-.0449	-.0330	-.0358	-.0217
30.000	.7396	.2292	-.1939	-.1829	-.0955	.1042	.1268	-.0218	-.0063	.0197	.0297	.0300	.0445	.0300	.0445
60.000	.7163	.2025	-.1468	-.1365	.0330	.2234	.2995	-.3014	-.0395	.0556	.0708	.0551	.0656	.0551	.0656
90.000	.9325	.5611	.0556	-.2577	-.2128	.0276	.1876	.2339	-.3834	-.0836	.0423	.0376	.0533	.0376	.0533
120.000	.3330	-.1400	-.4467	-.3955	-.2416	-.1324	-.1984	-.2023	-.4326	-.1476	.0700	.0587	.0683	.0587	.0683
150.000									-.0309	-.1431	.0455			.0455	
180.000	.2155	-.2893	-.5846	-.5466	-.2246	-.1331	-.0923	.1493	-.0344	-.1985	-.0547	-.0686	.0191	-.0686	.0191
165.000									-.3552	-.6498	-.6082	-.1461	-.0365	.1195	-.125
180.000	.9469	.5635	.1033	-.3912	-.6450	-.3433	-.1056	.0201	.1047	.1995	.1904	-.3667	-.1814	-.1115	.0042
270.000	.5280														.3138
K/LT	.7460	.8530	.9280												

K/LT .7460 .8530 .9280

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OL+T12+S12H25+AT10 EXTERNAL TANK

(081731)

ALPHA(11) = 10.010 BETA( 2) = -7.910

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.000	-.0135	-.0264	-.2202
30.000	.0616	.0574	-.1733
60.000	.0948	.1231	-.0600
90.000	.1250	.1157	
120.000	.1756	.1794	.5348
135.000	.2073	.2427	.3581
150.000	.1807	.2336	.4153
165.000	.1755	.2347	.4993
180.000	.1413	.1679	.2948

ALPHA(11) = 9.920 BETA( 3) = -5.920

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .5070 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5560 .6380

PMI

.000	.0089	1.0200	.6514	.1323	-.2465	-.2972	-.2008	.0170	.0669	.0030	-.0280	-.0225	-.0080	-.0048	.0023
30.000			.7206	.1972	-.1820	-.2091	-.1105	.0018	.1399	-.0228	-.0119	.0210	.0330	.0298	.0413
60.000			.6614	.1458	-.2186	-.1915	.0045	.2099	.3030	-.2878	-.0515	.0438	.0353	.0494	.0497
90.000		.8773	.5337	-.0026	-.3418	-.2561	.0131	.1851	.2382		-.4003	-.0933	.0293	.0143	.0384
120.000			.3135	-.1794	-.5020	-.3956	-.1966	-.1019	-.1675	-.2217	-.4796	-.1767	.0499	.0389	.0575
135.000								-.1160		-.0242		-.1908		.0153	
150.000			.1928	-.3108	-.6094	-.5451	-.1079	-.0914	-.0587	.1543	-.0433	-.2107	-.0831	-.0800	.0089
165.000	.9689	.5803		-.3630	-.6467	-.5412	-.1098	-.0241	.0596	.1363	.1155	-.1710	-.0901	-.0666	.0425
180.000		.5835		-.3920	-.5443	-.2429	-.0906	.0352	.1126	.2875	.2070	-.3790	-.1403	-.0973	.0116

X/LT .7480 .8530 .9280

PMI

.000	.0155	.0040	-.1898
30.000	.0632	.0623	-.1638
60.000	.0835	.1083	-.0948
90.000	.1108	.0979	
120.000	.1655	.1883	.5180
135.000	.1881	.2252	.3324
150.000	.1506	.2242	.4149
165.000	.1750	.2380	.4451
180.000	.1519	.1971	.2755

ORIGINAL PAGE IS  
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ARC11-716 IAI4 OA+712+512N23+AT10 EXTERNAL TANK (RB1731)

ALMAC(111) = 9.940 BETA0 (4) = -3.990

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PMI															
.000	.9915	1.0530	.6886	.1482	-.2459	-.2970	-.1107	.0379	.0923	.0206	-.0115	-.0071	.0073	.0193	.0803
30.000			.6909	.1707	-.2170	-.2415	-.1177	.1006	.1503	-.0199	-.0083	.0164	.0306	.0351	.0438
60.000			.6088	.0925	-.2750	-.2383	-.0143	.2001	.3101	-.2676	-.0533	.0284	.0463	.0435	.0426
90.000		.8404	.4510	-.0535	-.4128	-.2816	.0032	.1854	.2474		-.4035	-.0938	.0056	-.0027	.0294
120.000			.2827	-.2068	-.5537	-.3611	-.1604	-.0677	-.1278	-.2095	-.5949	-.1642	.0141	.0122	.0445
150.000								-.0713		-.0056		-.2533		-.0139	
180.000			.1863	-.3148	-.6207	-.4645	-.1412	-.0478	-.0194	.1538	-.0575	-.2293	-.1182	-.0963	.0026
210.000				-.3614	-.6338	-.4390	-.0759	.0087	.0768	.2001	.1316	-.2112	-.0951	-.0658	.0386
240.000	.9915	.5702	.1257	-.3774	-.6544	-.2017	-.0754	.0347	.1027	.2133	.2197	-.3678	-.1276	-.0867	.0185
270.000		.6347													
W/LT	.7480	.8530	.9280												

PMI

.000	.0415	.0289	-.1608												
30.000	.0677	.0675	-.1346												
60.000	.0763	.0994	-.0970												
90.000	.1062	.0935													
120.000	.1603	.1836	.4640												
150.000	.1745	.2145	.2961												
180.000	.1433	.2128	.2958												
210.000	.1696	.2325	.4572												
240.000	.1909	.2567	.5039												

ALMAC(111) = 9.940 BETA0 (5) = -1.980

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PMI															
.000	1.1080	1.0612	.6770	.1499	-.2407	-.2922	-.1039	.0313	.1019	.0285	-.0093	.0032	.0224	.0209	.0351
30.000			.6823	.1345	-.2587	-.3068	-.0828	.0905	.1481	-.0099	-.0241	.0096	.0223	.0245	.0378
60.000			.5906	.0793	-.3459	-.3228	-.0039	.1857	.3085	-.2434	-.0703	.0209	.0300	.0301	.0346
90.000		.7895	.3968	-.1182	-.4723	-.2942	.0003	.1921	.2537		-.4197	-.1130	-.0039	-.0056	.0282
120.000			.2484	-.2544	-.5826	-.3539	-.1223	-.0332	-.0926	-.1597	-.3274	-.1823	-.0120	-.0133	.0301
150.000								-.0334		.0143		-.2802		-.0337	
180.000			.1736	-.3326	-.6278	-.4574	-.1048	.0140	.0183	.1622	-.1130	-.2466	-.1312	-.1123	-.0217
210.000				-.3583	-.6563	-.3479	-.0712	.0272	.0933	.2134	.1540	-.2647	-.1225	-.0709	.0343
240.000	1.0080	.57.6	.1286	-.3617	-.6511	-.2434	-.0680	.0411	.1194	.2286	.2362	-.3554	-.1240	-.0672	.0245
270.000		.6824													
W/LT	.7480	.8530	.9280												

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A144 - VOL. 2

PAGE 4585

ARC11-716 1A14 CR+T12+312MS+ATIO EXTERNAL TANK

(RB1731)

A-PMAG(111) = 9.940 BETAO ( 5 ) = -1.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

P/L = .7460 .6330 .9280

0.000	.0509	.0418	-.1467
30.000	.0593	.0671	-.1454
60.000	.0648	.0887	-.1032
90.000	.0925	.0966	
120.000	.1392	.1756	.3795
150.000	.1453	.1956	.2356
180.000	.1096	.1868	.2186
210.000	.1483	.2115	.4117
240.000	.1286	.1957	.3060

A-PMAG(111) = 9.880 BETAO ( 6 ) = .040

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

P/L = .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

0.000	1.0000	1.0000	.6772	.1475	-.2403	-.3016	-.1013	.0587	.1048	.0298	-.0046	.0093	.0264	.0281	.0378
30.000			.6186	.0923	-.2945	-.3458	-.0984	.0752	.1413	-.0120	-.0417	-.0052	.0109	.0127	.0242
60.000			.4882	-.0342	-.4058	-.3808	-.0331	.1708	.3063	-.2147	-.0862	.0011	.0244	.0249	.0271
90.000		.7417	.3372	-.1757	-.5300	-.3162	.0078	.1962	.2814		-.4351	-.1220	-.0123	-.0196	.0237
120.000		.2139	-.2908	-.0083	-.3045	-.0891	.0011	-.0057	-.1021	-.1021	-.5328	-.2181	-.0284	-.0290	.0220
150.000		.1004	-.3464	-.6393	-.4668	-.0707	.0189	.0530	.1838	-.1462	-.2768	-.1542	-.1275	-.0356	
180.000			-.3499	-.6598	-.2977	-.0570	.0478	.1100	.2229	.1511	-.2995	-.1448	-.0901	.0193	
210.000	1.0140	.9737	.1370	-.0485	-.6473	-.2605	-.0763	.0445	.1168	.2317	.2440	-.3756	-.1240	-.0647	.0310
240.000		.7534													.2652

P/L = .7460 .6330 .9280

0.000	.0313	.0448	-.1440
30.000	.0489	.0564	-.1467
60.000	.0538	.0807	-.0988
90.000	.0893	.1035	
120.000	.1240	.1533	.3090
150.000	.1248	.1646	.1823
180.000	.0939	.1575	.1703
210.000	.1298	.1742	.2520
240.000	.1342	.1744	.1610

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-716 IAI14 06+712+S12N25+AT10 EXTERNAL TANK (RBIT31)

ALPHA(11) = 9.980 BETA( 7) = 2.070

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0080	1.0640	.6700	.1439	-.2507	-.2861	-.1820	.0545	.1019	.0223	-.0105	.0018	.0146	.0201	.0322
30.000			.5759	.0569	-.3345	-.3814	-.1144	.0557	.1352	-.0128	-.0670	-.0319	-.0083	-.0066	.0058
60.000			.4231	-.0913	-.4591	-.4993	-.0537	.1582	.3029	-.1896	-.1095	-.0165	.0054	.0157	.0217
90.000		.6872	.2826	-.2300	-.5744	-.3469	.0156	.2030	.2718	-.4502	-.3527	-.0966	-.0948	-.0344	
120.000			.1778	-.3294	-.6292	-.2829	-.0631	.0328	-.0125	-.1654	-.4823	-.0377	-.0364	.0179	
150.000								.0367		.0432		-.2654		-.0455	
180.000			.1410	-.3596	-.6642	-.3496	-.0483	.0438	.0814	.1719	-.1584	-.3129	-.1787	-.1258	-.0168
210.000				-.3471	-.6586	-.2394	-.0631	.0480	.1164	.2276	.1477	-.3176	-.1144	-.0645	.0259
240.000	1.0080	.9737	.1361	-.3620	-.6635	-.2693	-.0778	.0392	.1083	.2276	.2396	-.4005	-.1102	-.0659	.0269
270.000		.8038													.2605

X/LT .7460 .8530 .9280

PHI

.000	.0450	.0438	-.1453
30.000	.0365	.0428	-.1431
60.000	.0555	.0795	-.0812
90.000	.0790	.1223	
120.000	.1152	.1355	.2732
150.000	.1228	.1365	.1071
180.000	.1056	.1360	.0565
210.000	.1272	.1705	.2730
240.000	.1325	.1779	.2039

ALPHA(11) = 9.990 BETA( 8) = 4.110

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9979	1.0480	.6588	.1332	-.2490	-.3003	-.1983	.0413	.0871	.0155	-.0161	-.0138	.0033	.0114	.0178
30.000			.5292	.0079	-.3712	-.4143	-.2750	.0374	.1168	-.0170	-.0821	-.0920	-.0317	-.0275	-.0126
60.000			.3623	-.1527	-.5111	-.4915	.0055	.1374	.3111	-.1706	-.1259	-.0421	-.0060	.0050	.0163
90.000		.6368	.2256	-.2793	-.6128	-.2886	.0305	.2177	.2785	-.4660	-.3799	-.1450	-.1147	-.0995	
120.000			.1425	-.3583	-.6901	-.2117	-.0330	.0596	.0217	-.1384	-.4797	-.2516	-.0414	-.0388	.0089
150.000								.0906		.0630		-.2897		-.0386	
180.000			.1190	-.3795	-.6747	-.2134	-.0409	.0682	.1007	.1755	-.1878	-.3474	-.1930	-.1256	-.0236
210.000				-.3797	-.6664	-.2426	-.0620	.0528	.1201	.2246	.1218	-.2912	-.1088	-.0724	.0177
240.000	.9979	.5786	.1273	-.3792	-.6647	-.2559	-.0900	.0351	.0399	.2131	.2324	-.3350	-.1145	-.0928	.0138
270.000		.8578													.2563

X/LT .7460 .8530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1731)

ARC11-716 IA14 01+712+812025+AT10 EXTERNAL TANK

ALPHAO(11) = 9.990 BETA0 ( 8 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 .0349 .0289 -.1609  
 30.000 .0118 .0210 -.1575  
 60.000 .0466 .0728 -.0581  
 90.000 .0559 .1792  
 120.000 .1030 .1141 .2497  
 135.000 .1128 .1254 .0824  
 150.000 .0797 .0785 .0214  
 165.000 .1205 .1536 .1897  
 180.000 .1246 .1605 .1617

ALPHAO(11) = 9.980 BETA0 ( 9 ) = 6.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5590 .6390

PHI  
 .000 .9643 1.0250 .6465 .1286 -.2473 -.2954 -.2026 .0180 .0670 .0003 -.0264 -.0220 -.0175 -.0102 -.0028  
 30.000 .4747 -.0329 -.4062 -.4528 -.3561 .0048 .0956 -.0220 -.0733 -.0497 -.0485 -.0423  
 60.000 .2345 -.2100 -.5628 -.8235 .0043 .1468 .3093 -.1318 -.1354 -.0455 -.0099 -.0001 .0084  
 90.000 .5700 .1689 -.3374 -.6413 -.2213 .0415 .2301 .2922 -.4822 -.4147 -.1530 -.1441 -.0993  
 120.000 .1010 .3952 -.6712 -.1795 -.0107 .0875 .0532 -.1372 -.4807 -.2522 -.0547 -.0569 -.0035  
 135.000 .0957 .3991 -.6816 -.1844 -.0338 .0819 .1210 .1607 -.2494 -.3741 -.2322 -.1441 -.0455  
 150.000 .3938 .3938 -.6855 -.2269 -.0601 .0550 .1159 .2181 .0970 .3166 .1361 -.0998 -.0136  
 165.000 .9643 .5566 .1152 .3895 .15573 .3085 .3085 .3085 .3085 .3085 .3085 .3085 .3085 .3085  
 180.000 .8983 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

X/LT .7460 .8530 .9280

PHI  
 .000 .0116 .0070 -.1864  
 30.000 -.0121 -.0037 -.1785  
 60.000 .0371 .0627 -.0728  
 90.000 .0271 .0907  
 120.000 .0917 .0964 .2263  
 135.000 .0914 .1153 .0671  
 150.000 .0603 .0625 .0020  
 165.000 .0939 .1348 .2043  
 180.000 .0895 .1324 .1846

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ARC11-716 1A14 01+T12+S12M25+AT10 EXTERNAL TANK (RB1731)

ALPHA0(11) = 10.030 BETA0(10) = 8.170

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9321	.9829	.6233	.1110	-.2554	-.3105	-.2312	-.0065	.3306	-.0222	-.0477	-.0416	-.0387	-.0337	-.0107
30.000			.4160	-.0889	-.4503	-.5019	-.4313	-.0285	.0645	-.0266	-.1294	-.1020	-.0828	-.0830	-.0627
60.000			.2238	-.2710	-.6114	-.5615	-.0058	.1342	.3075	-.0828	-.1375	-.0533	-.0181	-.0159	-.0016
90.000		.5101	.1120	-.3810	-.6727	-.1938	.0429	.2418	.3004	-.5032	-.4421	-.1829	-.1720	-.1720	-.1404
120.000			.0603	-.4171	-.6212	-.1544	.0092	.1024	.0823	-.1217	-.4983	-.2461	-.0746	-.0835	-.0348
135.000								.1007		.0550		-.2965		-.0961	
150.000			.0644	-.4360	-.6410	-.1916	-.0312	.0833	.1363	.1547	-.2704	-.3795	-.2439	-.1792	-.0992
165.000				-.4139	-.6766	-.2293	.0617	.0446	.1077	.1974	.0535	-.3199	-.1621	-.1554	-.0533
180.000	.9321	.4341	.1051	-.3930	-.6758	-.3423	-.0903	.0008	.0530	.1720	.1388	-.3201	-.1869	-.1871	-.0661
270.000		.9450							.2490						

X/LT .7460 .8530 .9280

## PHI

.000	-.0162	-.0262	-.2190
30.000	-.0444	-.0369	-.2095
60.000	.0231	.0497	-.0886
90.000	-.0059	.0981	
120.000	.0704	.0948	.2058
135.000	.0706	.1048	.0529
150.000	.0418	.0521	-.0196
165.000	.0728	.1087	.1822
180.000	.0566	.0959	.1576

ALPHA0(11) = 10.030 BETA0(11) = 10.230

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8954	.9418	.5928	.0895	-.2695	-.3420	-.2462	-.0698	-.0115	-.0538	-.0859	-.0848	-.0756	-.0646	-.0622
30.000			.3592	-.1418	-.4961	-.5553	-.4508	-.0735	.0324	-.0394	-.1664	-.1402	-.1212	-.1089	-.1074
60.000			.1532	-.3309	-.6522	-.6128	-.0457	.1317	.3059	-.0678	-.1437	-.0761	-.0275	-.0233	-.0157
90.000		.4534	.0550	-.4297	-.6658	-.1965	-.0384	.2806	.3155	-.5283	-.4472	-.2192	-.2240	-.1812	
120.000			.0201	-.4430	-.4573	-.1346	-.0028	.0835	.1153	-.1448	-.5153	-.2230	-.1133	-.1234	-.0551
135.000								.0727		.0385		-.3041		-.1424	
150.000			.0279	-.4494	-.5492	-.1681	-.0477	.0566	.1259	.1296	-.2822	-.4092	-.2449	-.2053	-.0918
165.000				-.4295	-.6948	-.2341	-.0742	.0250	.0851	.1462	.0198	-.3300	-.1952	-.1871	-.0714
180.000	.8954	.3743	.0887	-.4173	-.6786	-.3854	-.1169	-.0218	.0032	.1142	.0895	-.3085	-.2355	-.2447	-.1083
270.000		.9906							.2578						

X/LT .7460 .8530 .9280

## PHI

.000			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			
270.000			



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81731)

ARC11-716 1A14 01+T12+SI2N25+AT10 EXTERNAL TANK

ALPHAD(11) = 10.090 BETA0 (11) = 10.230

SECTION (1) EXTERNAL TANK

X/L7 .7450 .8530 .9280

PMI	DEPENDENT VARIABLE CP
.000	-.0539 -.0661 -.2564
30.000	-.0763 -.0644 -.2361
60.000	.0067 .0325 -.1043
90.000	-.0315 .0516
120.000	.0602 .0754 .1868
135.000	.0623 .0933 .0418
150.000	.0268 .0518 -.0484
165.000	.0408 .0744 .1719
180.000	.0072 .0528 .1346

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ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK

(RB1T32) ( 17 APR 74 )

## REFERENCE DATA

SRFP = 2.4210 SQ. FT. XMRP = 29.5800 INCHES  
 LREF = 38.7090 INCHES YMRP = .0000 INCHES  
 BRFP = 38.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHA( 1 ) = -10.240 BETA( 1 ) = -9.900

## PARAMETRIC DATA

WACH = 1.100 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0260	.6993	.2899	-.1496	-.4276	-.4782	-.1699	-.1044	.0581	.0063	-.1868	-.3229	-.1383	-.1019
30.000				.3890	-.0630	-.3694	-.4355	-.4456	-.1755	-.1416	-.3001	-.3813	-.2328	-.1869	-.1786
60.000				.5615	.1003	-.2439	-.3064	-.1329	.0112	-.1339	-.4845	-.5998	-.4146	-.1541	.0222
90.000			1.1090	.7612	.2866	-.0856	-.1605	.0069	.4036	.4395	-.3500	-.3839	-.1796	-.0680	-.0799
120.000				.8943	.4189	.0235	-.0536	-.5219	.4500	.5473	.1524	.3507	.2581	.1203	.0094
150.000								.4024			.4101	.2295			.0176
180.000				.9137	.4315	.0401	-.0378	-.0427	.3604	.4372	.5667	.4999	.1914	-.0632	-.1644
210.000				.3865	-.0058	-.0833	-.1809	.2625	.3850	.5649	.5610	.1329	-.0761	-.2238	-.1631
270.000			1.0260	.7847	.3126	-.0804	-.1346	-.2194	.1956	.3528	.5372	.5073	-.3335	-.0103	-.3018
			.6552						.3658						-.2645

X/LT .7480 .8530 .9280

## PHI

.000	-.0472	.0531	-.0443
30.000	-.0936	-.0092	-.0014
60.000	-.0652	-.0653	-.0200
90.000	-.0642	-.6047	
120.000	.1394	-.0976	.7063
150.000	.1458	.0939	.4394
180.000	.0875	.1610	.4600
210.000	-.0567	.1646	.5676
270.000	-.0045	.1299	.4230

ALPHA( 1 ) = -10.220 BETA( 2 ) = -7.690

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0580	.6847	.3067	-.1355	-.4193	-.4682	-.1541	-.0923	.0345	.0474	-.1510	-.3329	-.1067	-.0710
30.000				.3815	-.0758	-.3764	-.4409	-.4371	-.0520	-.0888	-.2160	-.3635	-.2105	-.1601	-.1490
60.000				.5300	.0646	-.2764	-.3399	-.2829	.0174	-.1350	-.3532	-.5969	-.3691	-.1823	.0187
90.000			1.0600	.7135	.2367	-.1361	-.2113	-.1668	.4037	.4290	-.3637	-.4500	-.1900	-.0721	-.0578
120.000				.8501	.3681	-.0263	-.1041	-.1054	.4460	.5554	.1831	.3219	.2234	.0846	-.0227
150.000								.3863			.4182	.1999			-.0148
180.000				.8937	.4109	.0101	-.0689	-.1839	.3505	.4564	.5642	.3955	.2009	-.0842	-.1797
															-.1374



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01732)

ARC11-716 1A14 01-112+512N25+AT10 EXTERNAL TANK

ALPHA( 1 ) = -10.220 BETA( 2 ) = -7.890

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
165.000					.3778	-.0172	-.0972	-.1960	.2808	.4174	.5826	.5418	.0599	-.1201	-.2019	-.1785
180.000					.3247	-.0595	-.1352	-.2213	.2283	.3920	.5621	.5177	-.3819	-.0699	-.3191	-.2313
270.000																
PMI																
165.000																
180.000																
270.000																

X/LT .7460 .8530 .9280

PMI																
.000																
30.000																
60.000																
90.000																
120.000																
150.000																
180.000																
210.000																

ALPHA( 1 ) = -10.220 BETA( 3 ) = -5.900

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.0000	1.0000	.7077		.3157	-.1289	-.4088	-.4645	-.1647	-.0973	.0550	.0752	-.1431	-.3304	-.1034	-.0432	-.0448
30.000				.3757	-.0819	-.3860	-.4448	-.4428	-.1017	-.0432	-.1695	-.3585	-.1822	-.1597	-.1158	-.0948
60.000				.4949	.0290	-.3024	-.3573	-.3478	.0078	-.0958	-.3717	-.6814	-.3416	-.1189	.0121	-.0583
90.000			1.0280	.6584	.1831	-.1802	-.2558	-.2425	.3952	.4182	-.3698	-.4259	-.1467	-.0836	-.0751	
120.000				.6022	.3191	-.0674	-.1453	-.2368	.4077	.5603	.2271	.2910	.1781	.0504	-.0500	-.1309
150.000									.3720		.4248	.1596			-.0528	
180.000				.6638	.3778	-.0217	-.0982	-.2190	.3516	.4721	.5571	.3195	.1506	-.1228	-.2008	-.1856
210.000					.3641	-.0301	-.1113	-.1992	.3385	.4405	.5894	.5201	-.0161	-.1327	-.2272	-.1988
240.000				.8189	.3273	-.0621	-.1356	-.2256	.2623	.4258	.5768	.5214	-.3520	-.1241	-.3399	-.2312
270.000	1.0000	1.2010														
300.000			.7862							.3872						

X/LT .7460 .8530 .9280

PMI																
.000																
30.000																
60.000																
90.000																
120.000																
150.000																
180.000																
210.000																

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(RB1732)

ARC11-716 IA14 01+712+S12N23+AT10 EXTERNAL TANK

A-PMAD(1) = -10.220 BETAO(3) = -5.900

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8330 .9280

PMI

165.000 .0455 .1297 .5202  
180.000 .0161 .1126 .3629

A-PMAD(1) = -10.230 BETAO(4) = -3.930

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.000 1.1010 .7232 .3262 -.1326 -.4049 -.4329 -.2824 -.0903 .0467 .0903 -.1210 -.3304 -.0859 -.0324 -.0379  
30.000 .3665 -.0905 -.3866 -.4462 -.4467 -.4078 -.0821 -.0012 -.0951 -.3250 -.1842 -.1393 -.0821 -.0851  
60.000 .4657 -.0079 -.3246 -.3671 -.4078 -.0057 -.0057 -.0579 -.3378 -.5946 -.3059 -.1510 .0043 -.0472  
90.000 .9889 .6138 .1356 -.2189 -.2900 -.2452 .2929 .4142 -.3632 -.4451 -.1502 -.0846 -.0766  
120.000 .7574 .2751 -.1072 -.1855 -.2800 .3457 .5688 .2720 .2682 .1274 .0274 -.0710 -.1580  
135.000 .6404 .3481 -.0494 -.1269 -.2354 .3390 .4332 .4843 .5625 .2664 .0412 -.1310 -.2304 -.2168  
150.000 .3580 .3580 -.0382 -.1216 -.2171 .2866 .5999 .4662 .5023 -.0615 -.1073 -.2327 -.2018  
180.000 1.1110 1.2100 .8286 .3352 -.0590 -.1333 -.2207 .2413 .4493 .5915 .5327 -.2066 -.1260 -.2211 -.2018  
270.000 .8022 .3997

X/LT .7400 .8330 .9280

PMI

.000 -.0049 .0760 -.0593  
30.000 -.0331 .0557 -.0061  
60.000 -.0116 .0389 .0514  
90.000 .0363 -.0024  
120.000 .0581 -.1145 .5315  
135.000 .0609 .0575 .3397  
150.000 .0281 .1104 .2084  
165.000 .0449 .1272 .4503  
180.000 .0245 .1102 .3596

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81732)

ARC11-716 1A14 OR-T12-S12M25-AT10 EXTERNAL TANK

ALPHA(1) = -10.230 BETA( 5) = -1.940

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI																
.000	1.1090	.7337	.3334	-.1245	-.4016	-.4524	-.1699	-.0827	.0706	.1087	-.1109	-.3375	-.0768	-.0242	-.0412	
30.000			.3378	-.0968	-.3527	-.4519	-.4606	-.0866	.0608	-.0393	-.3099	-.2004	-.1249	-.0763	-.0743	
60.000			.4350	-.0341	-.3497	-.4095	-.4051	-.0204	-.0255	-.2846	-.5880	-.2920	-.1790	-.0214	-.0497	
90.000			.5624	.0821	-.2567	-.3262	-.0775	.2497	.4574		-.3756	-.4676	-.1496	-.0986	-.1007	
120.000			.7024	.2242	-.1497	-.2268	-.2775	.3754	.5689	.3051	.2397	.0785	-.0008	-.1064	-.1885	
135.000								.3466		.4348		.0997		-.1403		
150.000			.7991	.3078	-.0789	-.1563	-.2034	.3517	.4885	.5512	.2345	-.0776	-.1356	-.2773	-.2529	
165.000				.3383	-.0562	-.1355	-.2057	.3290	.4691	.5972	.4765	-.1437	-.1080	-.2356	-.2089	
180.000	1.1090	1.2060	.8268	.3357	-.0592	-.1356	-.1886	.2932	.4678	.5985	.5312	.0314	-.1182	-.8302	-.2221	
									.3923							
X/LT	.7460	.6330	.9280													

PMI																
.000	-.0149	.0821	-.0750													
30.000	-.0482	.0795	-.0181													
60.000	-.0806	.0769	.0700													
90.000	.0152	.0485														
120.000	.0291	-.1019	.4010													
135.000	.0278	.0441	.2306													
150.000	-.0030	.0746	.2024													
165.000	.0178	.1028	.4392													
180.000	-.0052	.0909	.3736													

ALPHA(1) = -10.240 BETA( 6) = .030

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI																
.000	1.1140	.7562	.3292	-.1218	-.4026	-.4546	-.2315	-.1013	.0653	.1144	-.1046	-.3402	-.0727	-.0179	-.0450	
30.000			.3457	-.1104	-.3957	-.4546	-.4679	-.0868	.0825	-.0103	-.2894	-.2218	-.1037	-.0718	-.0742	
60.000			.4031	-.0613	-.3686	-.4258	-.4090	.0108	-.0927	-.2706	-.5955	-.2781	-.1880	-.0456	-.0571	
90.000			.5005	.0378	-.2948	-.3613	-.1167	.2558	.3994		-.3633	-.4849	-.1494	-.1073	-.1181	
120.000			.6544	.1744	-.1922	-.2646	-.2582	.3047	.5710	.3266	.2152	.0442	-.0282	-.1329	-.2171	
135.000								.3106		.4324		.0134		-.1890		
150.000			.7583	.2749	-.1106	-.1851	-.2193	.3239	.4838	.5442	.1849	-.1615	-.1480	-.3190	-.2866	
165.000			.3282	-.0689	-.1481	-.2064	.2936	.4693	.5948	.4677	-.1415	-.1270	-.2407	-.2332		
180.000	1.1140	1.2080	.8339	.3372	-.0800	-.1364	-.2198	.2361	.4711	.5398	.0854	-.0897	-.2280	-.2219		
									.3057							
X/LT	.7460	.6330	.9280													

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(881732)

ARC1:-716 1A14 01-T12-S12N25+AT10 EXTERNAL TANK

ALPHA( 1 ) = -10.240 BETA( 6 ) = .030

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .7480 .8530 .9280

PMI

.000 -.0261 .0782 -.0816  
 30.000 -.0415 .0116 -.0347  
 60.000 -.0181 .075 .0660  
 90.000 .0093 .0735  
 120.000 .0219 -.0150 .2989  
 135.000 .0098 .0537 .1600  
 150.000 -.0109 .0475 .1414  
 165.000 .0034 .0629 .2377  
 180.000 .0132 .0958 .1963

ALPHA( 1 ) = -10.250 BETA( 7 ) = 2.040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5380

PMI

.000 1.1120 .7367 .3392 -.1233 -.4039 -.4534 -.3761 -.0825 .0793 .1134 -.1125 -.3390 -.0742 -.0200 -.0465  
 30.000 .3343 -.1225 -.4016 -.4541 -.3750 -.0864 .0979 .0147 -.2772 -.2523 -.0889 -.0635 -.0793  
 60.000 .3750 -.0843 -.3843 -.4416 -.4127 -.0129 .0284 -.2729 -.5870 -.2801 -.1946 -.0809 -.0617  
 90.000 .8541 .4652 -.0063 -.3236 -.3686 -.1532 .2254 .4207 -.3949 -.4929 -.1590 -.1121 -.1263  
 120.000 .5993 .1206 -.2285 -.3001 -.2696 .2185 .5687 .3413 .1889 .0116 -.0409 -.1630 -.2296  
 135.000 .7226 .2380 -.1390 -.2141 -.2378 .2412 .2510 .4230 -.0363 -.2245  
 150.000 .3045 -.0826 -.1631 -.2373 .3014 .4559 .5726 .4403 -.1033 -.0811 -.1987 -.2141  
 165.000 1.1120 1.2040 .8272 .3317 -.0594 .1371 -.2329 .2291 .5744 .5215 .0457 -.0822 -.2263 -.2369  
 180.000 .9444 .3931

V/LT .7480 .8530 .9280

PMI

.000 -.0314 .0811 -.0766  
 30.000 -.0248 .0796 -.0582  
 60.000 -.0002 .0676 .0910  
 90.000 .0065 .0677  
 120.000 .0109 .0273 .2435  
 135.000 -.0007 .0412 .0695  
 150.000 -.0159 .0291 .0225  
 165.000 -.0015 .0733 .2410  
 180.000 .0013 .0867 .1941



DATE 08 JAN 79

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4375

ARC11-716 1A14 01+712-S12N23+AT10 EXTERNAL TANK (R01732)

ALPHA(1) = -10.280 BETA(8) = 4.030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.0980	.7801	.3231	-.1296	-.4017	-.4582	-.2376	-.1032	.0763	.1122	-.1201	-.3364	-.0912	-.0887	-.0518
30.000			.3149	-.1350	-.4057	-.4585	-.4460	-.0844	.1294	.0327	-.2621	-.2890	-.0893	-.0325	-.0731
60.000			.3426	-.1072	-.3971	-.4533	-.2116	-.0813	.0542	-.2498	-.5877	-.2537	-.1886	-.1041	-.0663
90.000		.8008	.4151	-.0492	-.3538	-.4144	-.0849	.1010	.4217		-.3997	-.5934	-.1645	-.1173	-.1177
120.000			.5418	.0743	-.2647	-.3356	-.4000	.1407	.5767	.3568	.1682	-.0179	-.0686	-.1898	-.2086
135.000								.1679	.4081	.4081	-.0829		-.2516		
150.000			.6780	.1982	-.1697	-.2432	-.3403	.1869	.4445	.4763	.0457	-.2410	-.2176	-.3573	-.2543
165.000				.2821	-.0985	-.1735	-.2718	.2019	.4248	.5399	.4166	-.0824	-.0704	-.1790	-.2094
180.000	1.0980	1.1970	.8207	.3313	-.0580	-.1358	-.2280	.2062	.4374	.5566	.5143	-.0104	-.1083	-.2624	-.2272
270.000		.9860						.3976							

K/LT .7480 .8330 .9280

PM1

.000	-.0299	.0742	-.0691
30.000	-.0251	.0724	-.0714
60.000	.0019	.0817	.0865
90.000	-.0099	.0343	
120.000	-.0184	.0235	.1884
135.000	-.0389	.0253	.0425
150.000	-.0366	-.0085	-.0231
165.000	-.0239	.0472	.1457
180.000	-.0186	.0598	.1305

ALPHA(1) = -10.280 BETA(9) = 6.090

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.0780	.7320	.3108	-.1321	-.4123	-.4631	-.2095	-.1159	.0554	.0807	-.1326	-.3275	-.1182	-.0338	-.0538
30.000			.3016	-.1445	-.4171	-.4635	-.2103	-.0808	.1112	-.0174	-.2617	-.3192	-.0979	.0335	-.0735
60.000			.3124	-.1308	-.4140	-.4608	-.0966	-.1030	.0860	-.2905	-.5914	-.2400	-.1840	-.1111	-.0763
90.000		.7351	.3761	-.0852	-.3944	-.4401	-.0617	-.1381	.4331		-.4039	-.5183	-.1728	-.1211	-.1187
120.000			.4944	.0340	-.3040	-.3723	-.4344	.0925	.5791	.3647	.5552	-.0437	-.1015	-.2134	-.2021
135.000								.1143	.3934	.3934	-.1172		-.2749		
150.000			.6477	.1577	-.2036	-.2715	-.3732	.1153	.4178	.4376	.0100	-.3015	-.2234	-.4107	-.2530
165.000				.2605	-.1176	-.1927	-.2937	.1501	.3985	.5076	.3956	-.0746	-.0934	-.2329	-.2326
180.000	1.0780	1.1530	.8106	.3201	-.0678	-.1432	-.2346	.1922	.3950	.5353	.5035	-.3677	-.1741	-.2790	-.2548
270.000		1.0280						.3975							

K/LT .7480 .8330 .9280

PM1

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81732)

ARC11-715 1A14 CR+T12+S12N25+AT10 EXTERNAL TANK

ALPHA(1) = -10.299 BETA(9) = 6.090

SECTION (1) EXTERNAL TANK

W/LT .7400 .0530 .9280

PHI  
 .0000 -.0240 .3613 -.0620  
 30.0000 -.0316 .0603 -.0713  
 60.0000 -.0065 .0809 .751  
 90.0000 -.0903 -.0224  
 120.0000 -.0829 .0077 .1439  
 135.0000 -.0802 .0756 .0401  
 150.0000 -.0994 .0320 -.0527  
 165.0000 -.0777 .0141 .1554  
 180.0000 -.0742 .0130 .1464

ALPHA(1) = -10.240 BETA(10) = 8.120

SECTION (1) EXTERNAL TANK

W/LT .0000 .0080 .0490 .1130 .1790 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI  
 .0000 1.0550 .6745 .2962 -.1438 -.1266 -.1766 -.1722 -.1195 .0415 .0354 -.1694 -.3463 -.1214 -.0739 -.0624  
 30.0000 .2730 -.1550 -.4296 -.4755 -.1266 -.0613 .0343 -.0704 -.2506 -.3363 -.1097 -.0744 -.0808  
 60.0000 .2755 -.1627 -.4284 -.4704 -.1020 -.1134 .0596 -.2590 -.5859 -.2408 -.1624 -.1201 -.0914  
 90.0000 .3240 -.1211 -.4146 -.4636 -.0950 -.12035 .4303 -.4042 -.5323 -.1664 -.1266 -.1362  
 120.0000 .4401 -.10157 -.3592 -.4055 -.4684 .0317 .5695 .3704 .1439 -.0723 -.1214 -.2335 -.2290  
 135.0000 .5869 .1212 -.2335 -.3020 -.4023 .0508 .3653 .3715 .0308 -.1601 -.2813 -.4785 -.2983  
 150.0000 .2397 -.1327 -.2071 -.3081 .0945 .3401 .4574 .3895 -.5624 -.1642 -.2909 -.2352  
 165.0000 1.0590 1.1200 .8025 .3156 -.0705 -.1447 -.2226 .3435 .5034 .4957 .3679 .2356 -.3093  
 180.0000 1.0650 .9280 .4074

W/LT .7400 .0530 .9280

PHI  
 .0000 -.0254 .0495 -.0588  
 30.0000 -.0346 .0559 -.0752  
 60.0000 -.0112 .0732 .0710  
 90.0000 -.0922 .0951  
 120.0000 -.0961 -.0299 .1368  
 135.0000 -.1155 -.0081 .0265  
 150.0000 -.1340 .0328 -.0775  
 165.0000 -.1203 .0131 .1071  
 180.0000 -.1266 .0326 .0973



DATE 06 JAN 73 TABULATED PRESSURE DATA - 1416A - VOL. 9

(R01732)

ARC11-715 1414 3X+712+812MS+ATI EXTERNAL TANK

ALPHAD(1) = -10.290 BETAD(11) = 10.110

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

U, T	.0000	.0380	.0690	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI															
.000	1.0210	.6432	.2771	-.1987	-.4378	-.4915	-.1655	-.1179	.0404	.0197	-.1947	-.3273	-.1517	-.1083	-.0889
30.000			.2458	-.1937	-.4429	-.4892	-.1128	-.0687	.0172	-.1313	-.2890	-.3572	-.1493	-.0974	-.1036
60.000			.2471	-.1879	-.4452	-.2683	-.1138	-.1261	.0082	-.2558	-.5815	-.2393	-.1537	-.1192	-.1110
90.000		.6532	.2807	-.1564	-.4401	-.3903	-.1086	-.2679	.4243	-.4037	-.5442	-.1783	-.1317	-.1733	
120.000			.3637	-.0624	-.3779	-.4414	-.4894	-.0227	.5562	.3581	.1249	-.0941	-.1498	-.2710	-.2773
135.000							.0041			.3381		-.1871		-.3380	
150.000			.5611	.0802	-.2664	-.3212	-.4304	.0454	.3450	.3325	-.0661	-.3987	-.3518	-.4889	-.3354
165.000				.2121	-.1529	-.2245	-.3247	.0028	.2891	.4084	.3750	-.1299	-.2479	-.3180	-.2933
180.000	1.0210	1.0690	.7856	.3040	-.0790	-.1515	-.1981	.1416	.3019	.4712	.4735	-.2977	-.2594	-.3121	-.3584
270.000		1.0940													

U, T .7480 .8530 .9280

PMI															
.000	-.0385	.0386	-.0542												
30.000	-.0364	.0551	-.0726												
60.000	-.0198	.0737	.0773												
90.000	-.1447	-.1749													
120.000	-.1191	-.0649	.1307												
135.000	-.1403	-.0130	.0126												
150.000	-.1604	-.0678	-.0587												
165.000	-.1627	-.0366	.0714												
180.000	-.1933	-.0788	.0804												

ALPHAD(2) = -8.190 BETAD(1) = -9.870

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

U, T	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI															
.000	1.0630	.7119	.3587	-.1103	-.4049	-.4554	-.2457	-.1032	.0492	.0136	-.2066	-.2436	-.1325	-.0810	-.0676
30.000			.4481	-.0137	-.3333	-.4205	-.4899	-.1237	-.0807	-.2809	-.4221	-.1825	-.1797	-.1879	-.1087
60.000			.5132	.1470	-.2110	-.2805	-.3048	.0519	-.0380	-.5362	-.6130	-.3723	-.0567	.0350	-.0356
90.000		1.1440	.7872	.3039	-.0802	-.1553	-.1232	.4214	.4833		-.4006	-.3554	-.1343	-.0802	-.0493
120.000			.6806	.4013	-.0030	-.0812	-.0710	.4349	.5072	.0539	.3791	.2502	.1232	.0099	-.0380
135.000							.3579			.3273		.2147		.0188	
150.000			.6773	.3960	-.0091	-.0157	-.1171	.3427	.3849	.5128	.4847	.1570	-.0693	-.1634	-.0990
165.000			.5303	-.2808	-.1344	-.2192	.2455	.3355	.5303	.5999	.5999	.1307	-.0743	-.2310	-.1823
180.000	1.0630	1.1420	.7396	.2521	-.1109	-.1843	-.2679	.1571	.3073	.5108	.4945	-.3354	-.0168	-.3108	-.2892
270.000		.8896							.4596						

U, T .7480 .8530 .9280

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(R01732)

ARC11-7:6 IAI4 01012+312025+AT10 EXTERNAL TANK

ALPHA( 2 ) = -0.100 BETA( 1 ) = -9.970

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0300 .9200

W/LT	.7400	.0300	.9200
CP			
.000	-.0650	.0640	-.0446
30.000	-.0937	.0314	.0020
60.000	-.0306	.0280	.0142
90.000	.0100	-.4336	
120.000	.1372	-.0750	.7136
150.000	.1374	.1276	.4541
180.000	.0960	.1954	.5025
210.000	.0729	.2039	.5832
240.000	.0123	.1591	.4221

ALPHA( 2 ) = -0.200 BETA( 2 ) = -7.980

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0300	.0400	.1100	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
W/LT															
CP															
.000	1.0980	.7581	.3546	-.0929	-.3919	-.4473	-.2734	-.0865	.0482	.0498	-.1773	-.2658	-.1080	-.0544	-.0339
30.000			.4379	-.0290	-.3399	-.4031	-.4344	-.1635	-.0333	-.2185	-.3827	-.1804	-.1385	-.1434	-.0895
60.000			.5780	.1737	-.2439	-.3120	-.3659	.0435	-.0211	-.5050	-.6108	-.3286	-.0971	.0245	-.0476
90.000		1.1010	.7328	.2512	-.1271	-.2016	-.1944	.4183	.4755	-.4136	-.4127	-.1310	-.0652	-.0316	
120.000			.8351	.3492	-.0455	-.1240	-.1202	.4434	.5175	.0986	.3052	.2127	.0828	-.0191	-.0830
150.000								.3683		.3478		.1824		-.0081	
180.000			.8329	.3639	-.0319	-.1094	-.2189	.2261	.4156	.5190	.3944	.1758	-.0881	-.1764	-.1393
210.000				.3259	-.0617	-.1412	-.2409	.1879	.3783	.5486	.5286	.0552	-.1230	-.2025	-.1820
240.000	1.3980	1.1800	.7582	.2741	-.1036	-.1804	-.2656	.1576	.3328	.5385	.5039	-.3913	-.0890	-.3184	-.2332
270.000		.7475							.4811						

W/LT .7400 .0300 .9200

W/LT	.7400	.0300	.9200
CP			
.000	-.0347	.0649	-.0445
30.000	-.0441	.0533	.0019
60.000	-.0215	.0802	.0468
90.000	.0408	-.0226	
120.000	.1297	-.0885	.6621
150.000	.1297	.1173	.4438
180.000	.0824	.1859	.4344
210.000	.0640	.1840	.5790
240.000	.0235	.1700	.4186



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+112+512N25+AT10 EXTERNAL TANK

(R81132)

ALPHA0( 2) = -8.210 BETA0( 3) = -5.963

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1220	.7635	.3655	-.0939	-.3837	-.4399	-.4988	-.0667	.0655	.0724	-.1480	-.2926	-.0841	-.0298
30.000			.4284	-.0391	-.3510	-.4123	-.4690	-.1792	.0145	-.1801	-.3454	-.1540	-.1445	-.1093	-.0888
60.000			.5461	.0670	-.2731	-.3402	-.3860	.0097	.0362	-.4950	-.5970	-.2913	-.1337	.0178	-.0397
90.000		1.0630	.6832	.2004	-.1678	-.2445	-.2574	.4027	.4652	-.4097	-.4322	-.1252	-.0650	-.0617	-.0817
120.000			.7894	.3048	-.0851	-.1638	-.2112	.3683	.5264	.1218	.2771	.1709	.0508	-.0461	-.1257
135.000								.2720	.3618	.3618		.1455		-.0453	
150.000			.8277	.3357	-.0578	-.1339	-.2469	.2347	.4351	.5203	.3005	.1409	-.1213	-.1948	-.1784
165.000			.3134	-.0712	-.1521	-.2521	.1821	.4015	.5574	.5574	.5040	.3245	-.1362	-.2238	-.1971
180.000		1.1220	.7680	.2752	-.1020	-.1802	-.2694	.1465	.3733	.5528	.5045	-.3658	-.1244	-.3272	-.2394
270.000		.7922						.4857							

X/LT .7460 .8535 .9280

PHI

.000	-.0217	.0750	-.0467
30.000	-.0451	.0612	.0074
60.000	-.0168	.0694	.0627
90.000	.0394	.0265	
120.000	.0977	-.1096	.6296
135.000	.0971	.1046	.4110
150.000	.0589	.1653	.3730
165.000	.0809	.1661	.5322
180.000	.0280	.1411	.3668

ALPHA0( 2) = -8.220 BETA0( 4) = -1.980

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1490	.7880	.3824	-.0823	-.3777	-.4276	-.4881	-.0769	.0672	.0972	-.1068	-.2929	-.0464	-.0189
30.000			.4093	-.0575	-.3605	-.4188	-.4821	-.0991	.0845	-.0738	-.2856	-.1664	-.0931	-.0596	-.0389
60.000			.4795	.0015	-.3204	-.3804	-.3918	-.1150	.0585	-.4312	-.5632	-.2371	-.1759	-.0201	-.0261
90.000		.9823	.5888	.1040	-.2440	-.3116	-.3270	.1836	.4744	-.3947	-.4679	-.1103	-.0712	-.0832	-.0832
120.000			.6969	.2126	-.1578	-.2334	-.3239	.2033	.5484	.2023	.2246	.0746	.0012	-.0968	-.1735
135.000								.2033	.3873	.3873		.0533		-.1249	
150.000			.7689	.2742	-.1041	-.1819	-.2915	.1326	.4567	.5118	.2215	-.0803	-.1352	-.2641	-.2464
165.000			.2932	-.0907	-.1713	-.2683	.0244	.4353	.5712	.5712	.4647	-.1500	-.1037	-.2324	-.2001
180.000		1.1490	.7824	.2851	-.0993	-.1751	-.2691	.0193	.4188	.5725	.5247	-.0136	-.1203	-.2252	-.2190
270.000		.8869						.4833							

X/LT .7460 .8535 .9280

PHI

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(RB1T32)

ARC11-716 IA14 01+712+512N25+AT10 EXTERNAL TANK

ALPHA( 2 ) = -0.220 BETA( 4 ) = -1.980

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0307 .0735 -.0595  
 30.000 -.0325 .0695 -.0064  
 60.000 -.0176 .0753 .0815  
 90.000 .0239 .0774  
 120.000 .0336 -.0781 .4341  
 135.000 .0437 .0735 .2513  
 150.000 .0111 .1028 .2149  
 165.000 .0325 .1267 .4412  
 180.000 .0078 .1137 .3732

ALPHA( 2 ) = -0.150 BETA( 5 ) = .010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.1520 .7912 .3780 -.0847 -.3747 -.4295 -.4891 -.0932 .0694 .1036 .3008 -.0393 .0100 -.0221  
 30.000 .3950 -.0688 -.3672 -.4270 -.4876 -.0720 .0773 -.0333 -.2603 -.1901 -.0712 -.0362 -.0544  
 60.000 .4468 -.0299 -.3427 -.4055 -.3938 -.0958 .0674 -.3922 -.5569 -.2205 -.1894 -.0906 -.0319  
 90.000 .9340 .5369 .0552 -.2829 -.3461 -.2057 .0661 .4830 -.3998 -.4841 -.1094 -.0778 -.1032  
 120.000 .6449 .1630 -.1972 -.2706 -.3611 .1633 .5562 .2352 .1948 .0365 -.0234 -.1208 -.2046  
 135.000 .7321 .2397 -.1348 -.2120 -.3143 -.0741 .4651 .5164 .1742 -.1675 -.1392 -.3034 -.2825  
 150.000 .2769 -.1068 -.1864 -.2790 .1948 .4401 .5702 .4458 .4458 .1505 -.1191 -.2337 -.2313  
 165.000 1.1520 1.1740 .7837 .2632 -.1002 -.1763 -.2737 .4254 .5651 .5209 .0620 -.0841 -.2148 -.2182  
 180.000 .9320 .4663

X/LT .7460 .8530 .9280

PHI  
 .000 -.0384 .0806 -.0724  
 30.000 -.0519 .0772 -.0285  
 60.000 -.0190 .0698 .1025  
 90.000 .0145 .0882  
 120.000 .0392 -.0076 .3233  
 135.000 .0230 .0719 .1728  
 150.000 .0380 .0711 .1429  
 165.000 .0208 .0997 .2510  
 180.000 .0282 .1094 .1930



ARC11-716 1A14 CR+T12+S12N25+A110 EXTERNAL TANK (RB1732)

ALPHA( 2 ) = -0.190 BETA( 6 ) = 2.040

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1500	.7884	.3783	-.0812	-.3754	-.4287	-.4922	-.0748	.0865	.1133	-.1015	-.3058	-.0480	.0115	-.0822
30.000			.3806	-.0815	-.3787	-.4320	-.4900	-.0712	.0733	.0089	-.2423	-.2290	-.0398	-.0213	-.0589
60.000			.4179	-.0557	-.3572	-.4161	-.3939	-.0572	.0860	-.3464	-.5607	-.2036	-.1832	-.0829	-.0464
90.000		.8899	.4876	.0097	-.3134	-.3740	-.0671	.0037	.4884		-.4055	-.4955	-.1233	-.0901	-.1150
120.000			.5917	.1115	-.2358	-.3061	-.3890	.1216	.5501	.2607	.1658	.0012	-.0392	-.1908	-.2137
135.000								-.0321		.3890		-.0412		-.2127	
150.000			.6913	.2007	-.1642	-.2401	-.3347	-.1333	.4570	.5017	.0886	-.2285	-.1909	-.3263	-.2877
165.000			.2566	-.1213	-.1987	-.2901	-.1524		.4281	.5445	.4158	-.1059	-.0811	-.1948	-.2088
180.000	1.1500	1.1700	.7796	.2804	-.1004	-.1785	-.2736	.0789	.4083	.5402	.5014	.0220	-.0824	-.8204	-.2321
270.000		.9787													.4504

X/LT .7460 .8530 .9280

PHI

.000	-.0465	.0663	-.0662
30.000	-.0414	.0737	-.0526
60.000	-.0129	.0921	.1009
90.000	.0034	.0816	
120.000	.0199	.0395	.2903
135.000	.0051	.0579	.0964
150.000	-.0034	.0454	.0312
165.000	.0078	.0846	.2322
180.000	.0140	.1007	.1822

ALPHA( 2 ) = -0.240 BETA( 7 ) = 4.040

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1390	.7727	.3685	-.0894	-.3793	-.4367	-.4976	-.0903	.0882	.1054	-.1284	-.3222	-.0682	-.0093	-.0442
30.000			.3803	-.0945	-.3859	-.4441	-.4948	-.0747	.0875	.0373	-.2543	-.2569	-.0655	-.0319	-.0638
60.000			.3796	-.0837	-.3754	-.4293	-.3823	.0168	.0777	-.2145	-.5358	-.2024	-.1369	-.0907	-.0646
90.000		.8371	.4356	-.0318	-.3456	-.4038	-.0556	-.0087	.4808		-.4175	-.4914	-.1556	-.1104	-.1182
120.000			.5367	.0652	-.2732	-.3413	-.0451	.0769	.5065	.2969	.1453	-.0360	-.0764	-.1910	-.2097
135.000								.0810		.3863		-.0945		-.2497	
150.000			.6508	.1675	-.1951	-.2676	-.3699	.1255	.4140	.4597	.0357	-.2598	-.2203	-.3385	-.2578
165.000			.2391	-.1382	-.2138	-.3108	.1189		.3940	.5135	.3954	-.0979	-.0829	-.1832	-.2138
180.000	1.1390	1.1650	.7750	.2791	-.1020	-.1780	-.2750	.1371	.3953	.5265	.4896	-.0225	-.1089	-.2609	-.2322
270.000		1.0210													.4455

X/LT .7460 .8530 .9280

PHI

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1T32)

ARC11-716 1A14 01+T12-S12N25+AT10 EXTERNAL TANK

ALPHAO( 2) = -0.240 BETA0 ( 7) = 4.040

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7450 .8330 .9280

PMI	0.000	-0.0448	0.0649	-0.0631
30.000	-0.0360	0.0734	-0.0659	
60.000	-0.0064	0.0891	0.0826	
90.000	-0.0136	0.0514		
120.000	-0.0126	0.0367	0.1734	
135.000	-0.0365	0.0998	0.0490	
150.000	-0.0495	0.0063	-0.0233	
165.000	-0.0135	0.0627	0.1437	
180.000	-0.0126	0.0759	0.1354	

ALPHAO( 2) = -0.220 BETA0 ( 8) = 6.070

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	0.0000	0.0080	0.0490	0.1130	0.1780	0.1940	0.2150	0.2420	0.2900	0.3440	0.3940	0.4510	0.5050	0.5580	0.6080
PMI	1.1170	0.7560	0.3612	-0.0918	-0.3854	-0.4443	-0.5047	-0.0971	0.0619	0.0826	-0.1468	-0.3046	-0.0953	-0.0333	-0.0514
30.000			0.3416	-0.1152	-0.3964	-0.4473	-0.4634	-0.0662	0.0824	0.0344	-0.2449	-0.2849	-0.0801	-0.0393	-0.0545
60.000			0.3467	-0.1147	-0.3930	-0.4397	-0.1574	-0.0422	-0.0277	-0.1325	-0.5588	-0.2005	-0.1245	-0.0980	-0.0662
90.000		0.7895	0.3920	-0.0637	-0.3686	-0.4244	-0.0314	-0.1100	0.5634	-0.4131	-0.5150	-0.1689	-0.1088	-0.1158	
120.000			0.4912	-0.0188	-0.3049	-0.3721	-0.2159	0.0372	0.5532	0.3119	0.1292	-0.0579	-0.1055	-0.2083	-0.1994
135.000								0.0737		0.3780	-0.1270	-0.2708			
150.000			0.6042	0.1270	-0.2258	-0.2951	-0.3938	0.0827	0.4021	-0.268	0.0111	-0.3098	-0.2360	-0.4108	-0.2477
165.000				0.2142	-0.1545	-0.2324	-0.3274	0.0490	0.3591	0.4779	0.3727	-0.0816	-0.1107	-0.2455	-0.2340
180.000	1.1170	1.1180	0.7395	0.2693	-0.1096	-0.1965	-0.2800	0.1190	0.3498	0.5074	0.4899	-0.3685	-0.1835	-0.2757	-0.2606
270.000		1.0630													

X/LT .7480 .8330 .9280

PMI	0.000	-0.0370	0.0336	-0.0571
30.000	-0.0308	0.0649	-0.0698	
60.000	-0.0127	0.0991	0.0847	
90.000	-0.0541	0.0000		
120.000	-0.0588	0.193	0.1809	
135.000	-0.0779	0.0263	0.0517	
150.000	-0.0665	-0.0073	-0.0506	
165.000	-0.0632	0.0303	0.1581	
180.000	-0.0523	0.0362	0.1617	



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4583

ARC11-716 IA14 04+112+S12N25+AT10 EXTERNAL TANK

(RB1732)

ALPHA( 2) = -0.230 BETA( 9) = 0.080

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.0890	.7263	.3443	-.1032	-.3994	-.4532	-.4711	-.1067	.0703	.0496	-.1720	-.2693	-.1147	-.0662	-.0360	
30.000			.3100	-.1382	-.4122	-.4521	-.1375	-.0417	.0858	-.0150	-.2856	-.3223	-.1013	-.0584	-.0664	
60.000			.3110	-.1429	-.4109	-.4473	-.0923	-.0573	-.0909	-.1309	-.5555	-.2033	-.1109	-.0863	-.0785	
90.000			.7358	-.1031	-.3984	-.3341	-.0557	-.1803	.5748	-.4128	-.5288	-.1601	-.1064	-.1390	-.1390	
120.000			.4378	-.0271	-.3390	-.4088	-.1984	.0039	.5700	.3288	.1212	-.0926	-.1273	-.2334	-.2302	
135.000								.0216	.3601	.3601		-.1593		-.3133		
150.000			.5633	.0893	-.2572	-.3231	-.4234	.0283	.3714	.3630	-.0127	-.3719	-.2830	-.4769	-.2930	
165.000				.1921	-.1733	-.2492	-.3447	.0018	.3101	.4400	.3745	-.0893	-.1801	-.2962	-.2441	
180.000	1.0890	1.1050	.7511	.2620	-.1144	-.1951	-.2866	.1022	.2983	.4685	.4829	-.3511	-.1409	-.3136	-.3091	
270.000									.4592							

X/LT .7460 .8530 .9280

PMI

.000	-.0437	.3475	-.0552
30.000	-.0326	.0671	-.0648
60.000	-.0200	.0864	.0925
90.000	-.1034	-.0720	
120.000	-.0861	-.0126	.1588
135.000	-.1040	.0212	.0441
150.000	-.1148	-.0258	-.0635
165.000	-.1075	.0152	.1291
180.000	-.1127	-.0005	.1392

ALPHA( 2) = -0.240 BETA( 10) = 10.100

DEPENDENT VARIABLE CP

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.0990	.6963	.3290	-.1258	-.4096	-.4677	-.4277	-.1213	.0422	.0226	-.1932	-.2436	-.1399	-.0863	-.0656	
30.000			.2819	-.1591	-.4267	-.4784	-.1905	-.0708	.1039	.0080	-.3106	-.3184	-.1128	-.0663	-.0791	
60.000			.2773	-.1661	-.4285	-.2290	-.0986	-.0775	-.1052	-.2070	-.5545	-.2046	-.1032	-.0889	-.0959	
90.000			.6891	-.3047	-.1410	-.4254	-.1172	-.0744	.5616		-.4148	-.5166	-.1559	-.1104	-.1805	
120.000			.3891	-.0708	-.3748	-.4427	-.1891	-.0516	.5677	.3270	.1072	-.1173	-.1497	-.2645	-.2794	
135.000								-.0276	.3296	.3296		-.2041		-.3393		
150.000			.5210	.0492	-.2889	-.3561	-.4517	-.0361	.3373	.3209	-.0550	-.4189	-.3552	-.4898	-.3340	
165.000				.1688	-.1927	-.2675	-.3620	-.0526	.2598	.3894	.3658	-.1417	-.2658	-.3194	-.2975	
180.000	1.0990	1.0310	.7590	.2541	-.1209	-.1995	-.2839	-.0946	.2557	.4348	.4620	-.3004	-.2648	-.3318	-.3736	
270.000		1.1320														

X/LT .7460 .8530 .9280

PMI

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ARC11-716 1A14 01+712+S12N25+AT10 EXTERNAL TANK (R81732)

ALPHA( 2 ) = -8.240 BETA( 10 ) = 10.100

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI

.000 -.0639 .0493 -.0399  
 30.000 -.0378 .0700 -.0628  
 60.000 -.0244 .0903 .1052  
 90.000 -.1576 -.1546  
 120.000 -.1061 -.0495 .1486  
 135.000 -.1301 .0161 .0302  
 150.000 -.1348 -.0355 -.0732  
 165.000 -.1463 -.0049 .1003  
 180.000 -.1792 -.0462 .1205

ALPHA( 3 ) = -6.210 BETA( 1 ) = -10.020

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

.000 1.0900 .7607 .3874 -.0710 -.3744 -.4295 -.4980 -.0862 .0514 .0183 -.2201 -.2350 -.1298 -.0694 -.0649  
 30.000 .5031 .0365 -.2935 -.3652 -.4076 -.1740 -.0208 -.2502 -.3964 -.1552 -.1952 -.1671 -.0889  
 60.000 .6848 .1819 -.1794 -.2516 -.2964 .1182 .0473 -.4444 -.5635 -.3134 -.0540 .0488 -.0336  
 90.000 1.1690 .8052 .3191 -.0691 -.1466 -.1297 .4400 .5211 -.5679 -.3909 -.1025 -.0399 .0348  
 120.000 .6650 .3819 -.0165 -.0992 -.1088 .4132 .4657 -.0086 .3224 .2521 .1288 .0197 -.0362  
 135.000 .8386 .3543 -.0412 -.1206 -.1798 .2641 .3360 .4646 .4652 .1486 -.0720 -.1566 -.1013  
 150.000 .2832 -.0994 -.1753 -.2651 .0046 .2866 .4966 .5222 .1331 -.0807 -.2288 -.1597  
 165.000 1.0900 1.1100 .6956 .2149 -.1480 -.2216 -.3022 .0572 .2505 .4867 .4794 -.3299 -.0425 -.3048 -.2693  
 180.000 .7177 .5936  
 270.000 .9280 .5936

X/LT .7460 .8530 .9280

PMI

.000 -.0714 .0658 -.0460  
 30.000 -.0824 .0576 -.0037  
 60.000 -.0035 .0991 .0905  
 90.000 .0447 -.0337  
 120.000 .1690 -.0337 .7265  
 135.000 .1721 .1651 .4776  
 150.000 .1192 .2462 .5391  
 165.000 .0935 .2472 .5994  
 180.000 .0424 .1945 .4253



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 Q1+T12+S12N5+AT10 EXTERNAL TANK (R01T32)

ALPHA( 3 ) = -6.220 BETA( 2 ) = -7.960

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1250	.7893	.3992	-.0612	-.3663	-.4238	-.4884	-.0671	.0614	.0482	-.1820	-.2667	-.1078	-.0484
30.000				.4913	.0178	-.3073	-.3741	-.4390	-.3131	.0258	-.1878	-.3504	-.1599	-.1480	-.1300
60.000				.6206	.1404	-.2127	-.2825	-.3355	.0936	.0645	-.4407	-.5702	-.2695	-.1121	.0379
90.000		1.1270		.7497	.2611	-.1168	-.1932	-.1898	.4326	.3124	-.5161	-.4138	-.1372	-.0453	-.0448
120.000				.8179	.3288	-.0636	-.1433	-.1615	.3816	.4750	.0241	.2821	.2075	.0829	-.0636
135.000								.2665		.2782		.1738		-.0020	
150.000				.8154	.3273	-.0679	-.1455	-.2398	.1630	.3670	.4711	.3555	.1481	-.0690	-.1375
165.000				.2762	-.1040	-.1812	-.2801	-.0132	.3340	.5124	.5081	.0488	-.1151	-.2036	-.1785
180.000	1.1250	1.1230	.7114	.2247	-.1431	-.2185	-.3016	.0126	.3081	.5155	.4906	-.3948	-.0849	-.3172	-.2312
270.000		.7728							.6166						

X/LT .7460 .6330 .9280

PHI

.0000	-.0467	.0894	-.0419
30.000	-.0598	.0767	-.0017
60.000	-.0035	.1165	.0733
90.000	.0593	.0515	
120.000	.1377	-.0292	.8575
135.000	.1415	.1688	.4596
150.000	.0997	.2290	.4826
165.000	.0654	.2265	.5874
180.000	.0433	.1812	.4135

ALPHA( 3 ) = -6.230 BETA( 3 ) = -5.960

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1320	.8146	.4128	-.0548	-.3593	-.4147	-.4829	-.0744	.0774	.0680	-.1482	-.2973	-.0825	-.0404
30.000				.4812	.0017	-.3211	-.3829	-.4536	-.2575	.0736	-.1360	-.3148	-.1482	-.1310	-.0802
60.000				.5864	.1010	-.2485	-.3112	-.3409	.0291	.0980	-.4277	-.5642	-.2504	-.1591	.0259
90.000		1.0870		.7014	.2099	-.1588	-.2341	-.2427	.4138	.5085	-.4834	-.4368	-.1112	-.0483	-.0551
120.000				.7741	.2816	-.1016	-.1805	-.2115	.3063	.4865	.0332	.2512	.1636	.0498	-.0410
135.000								.1809		.3009		.1307		-.0387	
150.000				.7893	.2915	-.0941	-.1679	-.2790	.0968	.3954	.4774	.2818	.1249	-.1923	-.1716
165.000				.2646	-.1113	-.1906	-.2890	-.0425	.3618	.5291	.4868	-.0331	-.1372	-.2226	-.1883
180.000	1.1320	1.1310	.7217	.2237	-.1426	-.2184	-.3043	.0111	.3289	.5313	.4947	-.3830	-.1233	-.3229	-.2206
270.000		.8222							.5855						

X/LT .7460 .6330 .9280

PHI

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ARC11-716 1A14 Q1\*112+S12N25+AT10 EXTERNAL TANK

(RB1732)

ALPHA0( 3) = -6.230 BETA0( 3) = -5.960

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI  
 .000 -.0320 .0726 -.0445  
 30.000 -.0431 .0724 .0040  
 60.000 -.0111 .1094 .0778  
 90.000 .0511 .0977  
 120.000 .1056 -.0616 .6349  
 135.000 .1064 .1442 .4330  
 150.000 .0772 .2009 .4184  
 165.000 .0757 .2003 .3353  
 180.000 .0443 .1702 .3671

ALPHA0( 3) = -6.120 BETA0( 4) = -1.980

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
 PHI  
 .000 1.1790 .6331 .4298 -.0492 -.3526 -.4064 -.4720 -.0606 .0766 .1008 -.1086 -.2889 -.0407 .0203 -.0128  
 30.000 .4582 -.0176 -.3295 -.3940 -.4635 -.1194 .1085 .0396 -.2440 -.2902 -.3702 -.0342 -.0500  
 60.000 .5230 .0337 -.2966 -.3599 -.3559 -.1130 .1449 .3685 .5354 .2159 .1729 .0344 .0123  
 90.000 1.0090 .6051 .1142 .2375 .3072 .3061 .3179 .5103 .4838 .4772 .1021 .0564 .0776  
 120.000 .6821 .1897 .1784 .2488 .3373 .1655 .5115 .1234 .1988 .0674 .0002 .0894 .1721  
 135.000 .7509 .2316 .1400 .2130 .3207 .0904 .3998 .4631 .2044 .0952 .1351 .2547 .2394  
 165.000 .2429 .1327 .2089 .3046 .1045 .3800 .5276 .4420 .1510 .1096 .2317 .1941  
 180.000 .2317 .1387 .2156 .3071 .0399 .3574 .5324 .5019 .0625 .1243 .2230 .2135  
 270.000 .9135 .5502

X/LT .7460 .6530 .9280

PHI  
 .000 -.0367 .0885 -.0565  
 30.000 -.0994 .0754 -.0049  
 60.000 -.0204 .0991 .0820  
 90.000 .0215 .1078  
 120.000 .0599 .0557 .4729  
 135.000 .0495 .1035 .2750  
 150.000 .0197 .1325 .2350  
 165.000 .0405 .1319 .4454  
 180.000 .0183 .1320 .3707



99C11-716 1A1 Q1+Y12+S12N25+AT10 EXTERNAL TANK

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ALPHA( 3 ) = -6.130      BETA( 5 ) = .000
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DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412
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171	7400	.8530	.9200
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[illegible]
$$\text{BETAO} ( 6 ) = -6.120$$

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT	.0500	.0580	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
WT															
.000	1.1000	.6435	.4293	.0416	-.3558	-.4062	-.4729	-.1133	.1055	.1188	-.1052	-.3008	-.0356	.0284	-.0147
30.000			.4247	-.0505	-.3526	-.4098	-.4712	-.0972	.1025	.0484	-.2275	-.2195	-.0459	.0352	-.0381
60.000			.4469	-.0244	-.3541	-.3933	-.3683	-.1623	.1743	-.3278	-.5004	-.1533	-.1231	.0850	-.0429
90.000		.9180	.5059	.0227	-.3033	-.3650	-.1780	.1522	.5449	-.4330	-.4800	-.1123	.1068	.1047	
120.000			.5642	.0972	-.2459	-.3135	-.1158	.0862	.3942	.2122	.1559	-.0076	-.0407	-.1475	.1966
150.000			.6001	.1845	-.1946	-.2657	-.3602	.0210	.3905	.4559	.0878	-.2350	-.1887	.3163	-.2560
165.000				.2074	-.1582	-.2760	-.3257	-.1751	.3587	.5012	.3899	-.1582	.0814	.1946	-.1950
180.000	1.1000	1.1300	.7282	.2293	-.1476	-.2195	-.3117	.0583	.3210	.4979	.4746	-.0093	.0816	-.2139	-.2204
200.000									.5047						

10/17 7463 .6537 .9286

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R91132)

ARC11-716 IA14 01+T12+S12M23+AT10 EXTERNAL TANK

ALPHA( 3 ) = -6.120 BETA( 6 ) = 2.030

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7480 .8530 .9280

RMI  
 .000 -.0465 .0680 -.0568  
 30.000 -.0421 .0757 -.0417  
 60.000 -.0144 .1022 .0882  
 90.000 -.0108 .1040 .1040  
 120.000 .0317 .0491 .2639  
 135.000 .0157 .0731 .1035  
 150.000 .0095 .0609 .0582  
 165.000 .0180 .1040 .2294  
 180.000 .0256 .1209 .1748

ALPHA( 3 ) = -6.110 BETA( 6 ) = 4.060

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2800 .3440 .3940 .4510 .5050 .5580 .6380  
 RMI  
 .000 1.1580 .8295 .4192 .0459 -.3514 -.4107 -.4769 -.1012 .0075 .1015 -.1270 -.3157 -.0634 .0091 -.0301  
 30.000 .4927 .02740 .1515 .14204 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072  
 60.000 .4108 .0570 .15613 .14085 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072 .14072  
 90.000 .4531 .10178 .1337 .13925 .13925 .13925 .13925 .13925 .13925 .13925 .13925 .13925 .13925 .13925  
 120.000 .5290 .10501 .10847 .13479 .13479 .13479 .13479 .13479 .13479 .13479 .13479 .13479 .13479 .13479  
 135.000 .6192 .1319 .12259 .12927 .12927 .12927 .12927 .12927 .12927 .12927 .12927 .12927 .12927 .12927  
 150.000 .1878 .1173 .1252 .1252 .1252 .1252 .1252 .1252 .1252 .1252 .1252 .1252 .1252 .1252  
 165.000 1.1680 1.1260 .7212 .2232 -.1186 -.2225 -.3185 .0224 .3335 .4528 .4673 -.0370 -.1034 -.2509 -.2221  
 180.000 1.0520

K/LT .7480 .8530 .9280

RMI  
 .000 -.0491 .0671 -.0515  
 30.000 -.0241 .0689 -.0525  
 60.000 -.0134 .0883 .0815  
 90.000 -.0344 .0766 .1900  
 120.000 -.0004 .0556 .1900  
 135.000 -.0215 .0589 .0629  
 150.000 -.0357 .0246 -.0111  
 165.000 -.0026 .0849 .1598  
 180.000 .0018 .1025 .1529



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI44 - VOL. 9

PAGE 4589

ARC11-716 IAI4 OR-712-S12M25-AT10 EXTERNAL TANK

(R81732)

ALPHA( 3 ) = -6.190 BETA( 6 ) = 6.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5490	.6380
PHI															
.000	1.1430	.8066	.4106	-.0580	-.3585	-.4167	-.4822	-.1221	.0944	.0763	-.1466	-.3004	-.0959	-.0226	-.0394
30.000			.3760	-.0816	-.3782	-.4284	-.4847	-.0677	.0951	.0532	-.2248	-.2567	.0801	-.0193	-.0285
60.000			.3740	-.0839	-.3773	-.4226	-.2427	-.0475	.1211	-.2493	-.4798	-.1628	-.0830	-.0635	-.0568
90.000		.6125	.4072	-.0537	-.3565	-.3935	-.0268	-.0480	.4647	-.4304	-.3990	-.1430	-.1126	-.0960	-.0960
120.000			.4797	.0094	-.3095	-.3758	.0122	.0227	.3044	.2424	.1167	-.0676	-.1113	-.2033	-.1764
135.000							.0199			.3550		-.1391		-.2634	
150.000			.5737	.0918	-.2431	-.3146	-.4118	.0391	.3179	.3973	.0175	-.3267	-.2372	-.4016	-.2291
165.000				.1681	-.1890	-.2639	-.3589	.0757	.2561	.4396	.3909	-.0918	-.1183	-.2375	-.2181
180.000	1.1430	1.0780	.7097	.2151	-.1501	-.2275	-.3165	.0046	.3035	.4688	.4729	-.3665	-.1849	-.2677	-.2540
270.000		1.0940						.4944							

K/LT .7480 .8330 .9280

PHI

.000	-.0455	.0328	-.0484
30.000	-.0236	.0732	-.0623
60.000	-.0239	.0822	.0498
90.000	-.0342	.0429	
120.000	-.0386	.0385	.1728
135.000	-.0570	.0492	.0639
150.000	-.0667	.0146	-.0410
165.000	-.0469	.0544	.1703
180.000	-.0344	.0657	.1846

ALPHA( 3 ) = -6.190 BETA( 9 ) = 6.090

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5490	.6380
PHI															
.000	1.1120	.7770	.3919	-.0646	-.3691	-.4275	-.4942	-.1330	.0645	.0254	-.1845	-.2632	-.1230	-.0581	-.0571
30.000			.3434	-.1061	-.3906	-.4414	-.4806	-.0665	.0964	.0417	-.2341	-.2632	-.0704	-.0290	-.0436
60.000			.3403	-.1109	-.3944	-.4384	-.1573	-.0691	.0691	-.1804	-.4499	-.1695	-.0727	-.0314	-.0646
90.000		.7829	.3670	-.0837	-.3843	-.1568	-.0384	-.0795	.4055	-.4353	-.3606	-.1427	-.1117	-.1124	-.1124
120.000			.4368	-.0267	-.3431	-.4018	-.0282	-.0153	.3074	.2441	.1162	-.1039	-.1319	-.2316	-.2028
135.000							-.0153			.3426		-.1795		-.3059	
150.000			.5391	.0596	-.2772	-.3424	-.4377	.0120	.2914	.3471	.0101	-.3776	-.2797	-.4826	-.2668
165.000				.1470	-.2082	-.2811	-.3756	-.0485	.2642	.4048	.3489	-.0990	-.1758	-.2936	-.2322
180.000	1.1120	1.0380	.7023	.2102	-.1570	-.2318	-.3242	.0107	.2474	.4345	.4556	-.3488	-.2401	-.3133	-.2996
270.000		1.1230						.5013							

K/LT .7480 .8330 .9280

PHI

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(R01732)

ARC11-716 1A14 Q1+712+S12M25+AT10 EXTERNAL TANK

ALPHA( 3 ) = -6.190 BETA( 9 ) = 8.090

## SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7480 .8330 .9280

PMI

.000 -.0614 .0403 -.0315  
 30.000 -.0313 .0721 -.0597  
 60.000 -.0298 .0793 .0368  
 90.000 -.0663 -.0064  
 120.000 -.0614 .0012 .1573  
 150.000 -.0773 .0426 .0905  
 180.000 -.0632 -.0067 -.0592  
 210.000 -.0824 .0411 .1510  
 240.000 -.0593 .0365 .1790

ALPHA( 3 ) = -6.170 BETA( 10 ) = 10.090

## SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .340 .4510 .5050 .5580 .6380

PMI

.000 1.0680 .7484 .3716 -.0848 -.3927 -.4391 -.5077 -.1335 .0230 -.0460 -.2290 -.2273 -.1375 -.0765 -.0745  
 30.000 .3149 -.1291 -.4597 -.4033 -.3782 -.1155 .0793 .0396 .0396 -.2367 -.2414 -.0706 -.0395 -.0657  
 60.000 .3527 -.1413 -.4120 -.3712 -.3896 -.0658 -.0829 -.0939 -.4215 -.1735 -.0778 -.0578 -.0870  
 90.000 .7190 .2211 -.1201 -.4237 -.0380 -.0581 -.1163 .3648 -.4258 -.3307 -.1359 -.1142 -.1613  
 120.000 .3989 -.0705 -.3777 -.4023 -.0589 -.0541 .3261 .3518 .1089 -.1354 -.1345 -.2626 -.2497  
 150.000 .4938 .0239 -.3078 -.3715 -.4649 -.0336 .2474 .2854 -.0230 -.4293 -.2108 -.3367  
 180.000 .1219 -.2293 -.3006 -.3947 -.0909 .2124 .3498 .3513 -.1545 -.2671 -.3203 -.2866  
 210.000 1.0680 .9992 .6878 .2002 -.1652 -.2401 -.3315 .0293 .2025 .3998 .4901 -.2983 -.2689 -.3446  
 240.000 1.1610 .5043

K/LT .7480 .8330 .9280

PMI

.000 -.0657 .0415 -.0577  
 30.000 -.0401 .0739 -.0621  
 60.000 -.0369 .0814 .0560  
 90.000 -.1088 -.0628  
 120.000 -.0806 -.0266 .1507  
 150.000 -.0978 .0328 .0366  
 180.000 -.1032 -.0230 -.0831  
 210.000 -.1201 .0243 .1344  
 240.000 -.1559 -.0096 .1568



ARC11-716 IAI4 CR+T12+S12+M3+AT10 EXTERNAL TANK (981732)

ALPHA(1) = -4.240 BETA(1) = -10.010

SECTION (1) EXTERNAL TANK		DEPENDENT VARIABLE C <sub>1</sub>														
K/L	T	.0000	.0080	.0480	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
P <sub>W1</sub>																
.000	1.1070	.0032	.4275	-.0391	-.3533	-.4106	-.4653	-.2134	.0281	-.0383	-.2351	-.2126	-.1463	-.0679	-.0747	
30.000			.5543	.0731	-.2634	-.3357	-.4030	-.2090	-.0499	-.2297	-.4005	-.1440	-.1320	-.1990	-.0722	
60.000			.6966	.2114	-.1190	-.2301	-.2445	.1776	.1230	-.4212	-.5068	-.3146	-.0632	.0965	-.0062	
90.000	1.1000		.8103	.3187	-.0724	-.1511	-.1422	.4406	.5417		-.6232	-.3948	-.0976	-.0334	-.0155	
120.000			.8321	.3453	-.0523	-.1305	-.1427	.3622	.4355	-.0925	.2633	.2484	.1239	.0146	-.0370	
150.000								.2499		.1659		.2034		.0131		
180.000			.7856	.2995	-.0920	-.1671	-.2376	.1389	.2764	.4003	.3103	.1213	-.0857	-.1641	-.1044	
210.000			.2260	-.1139	-.2270	-.3178	-.2260	.2379	.4539	.4896	.1175	-.0930	-.2434	-.1602	-.1602	
240.000	1.1070	1.0680	.6390	.1574	-.1980	-.0670	-.3502	-.1699	.2377	.4583	.4547	-.3457	-.0860	-.3262	-.2545	
		.7328							.4183							

K/L T .7460 .6530 .9280

P <sub>W1</sub>																
.000			-.0864	.0356	-.0715											
30.000			-.0776	.0513	-.0293											
60.000			.0197	.1447	.0644											
90.000	.0800		.0800	.0528												
120.000	.1701	.0336	.7412													
150.000	.1762	.2328	.4995													
180.000	.1324	.2776	.5590													
210.000	.1123	.2747	.6030													
240.000	.0667	.2197	.4190													

ALPHA(2) = -4.270 BETA(2) = -8.020

SECTION (1) EXTERNAL TANK		DEPENDENT VARIABLE C <sub>2</sub>														
K/L	T	.0000	.0080	.0480	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
P <sub>W1</sub>																
.000	1.1440	.8385	.4469	-.0249	-.3410	-.4013	-.4695	-.1944	.0810	.0327	-.1925	-.2428	-.1888	-.0489	-.0536	
30.000			.5423	.0639	-.2728	-.3402	-.4165	-.2807	.0528	-.1618	-.3333	-.1255	-.1437	-.1253	-.0608	
60.000			.6612	.1746	-.1858	-.2572	-.2617	.1242	.1387	-.3696	-.5152	-.2506	-.1095	.0403	-.0122	
90.000	1.1410		.7583	.2659	-.1128	-.1921	-.1938	.4471	.5425		-.5824	-.4119	-.0942	-.0356	-.0283	
120.000			.7902	.2924	-.0671	-.1564	-.1980	.3141	.4225	-.0561	.2185	.2054	.0859	-.0122	-.0720	
150.000								.1054		.2070		.1634		-.0042		
180.000			.7649	.2741	-.1082	-.1860	-.2774	-.0462	.3173	.4193	.3027	.1236	-.0880	-.1718	-.1291	
210.000			.2233	-.1120	-.2249	-.3211	-.2300	.2875	.4753	.4786	.4009	-.1106	-.2031	-.1632	-.1632	
240.000	1.1440	1.0770	.6559	.1656	-.1868	-.2577	-.3403	-.0670	.2540	.4871	.4624	-.4017	-.0776	-.3150	-.2135	
		.7872							.5370							

K/L T .7460 .6530 .9280

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ARC11-716 1A14 0X+12+S12N25+AT10 EXTERNAL TAP (R01T32)

$$\text{ALPHA}(1) = -4.275 \quad \text{BETA}(2) = -0.920$$

## DEPENDENT VARIABLE C6

447	.7400	.0539	.9200
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0.000	-0.0946	-0.0503	-0.0204
30.000	-0.5314	-0.3770	-0.1937
60.000	0.0103	0.1468	0.7088
90.000	0.742	-0.1231	
120.000	0.1373	0.3542	0.6560
150.000	-0.1439	-0.2246	0.4724
180.000	-0.1110	-0.269	-0.5105
210.000	-0.043	0.2616	-0.5982
240.000	-0.0668	0.2112	-0.4069

$$\text{ALPHA}(4) = -4.290 \quad \text{BETA}(3) = -5.970$$

## DEPENDENT VARIABLE CP

6675' 6800' 6860' 6900'

五

1.1730	.0033	.4519	-10146	-13297	-13901	-14610	-15553	10226	5745	-1547	-12761	-10930	-01331	-03537
31.1000		5313	15440	12858	-13529	-14233	-12679	11155	-1031	-12835	-11347	-12662	-00852	-06687
61.0000		6029	13342	12615	-12384	-13039	10154	13766	-3749	-15161	-12097	-15594	00224	-00082
1.1050		7037	21148	-11535	-12317	-12394	12154	16443		-15570	-14335	-10956	-03559	-04339
120.0000		7476	22559	-11262	-12022	-12395	21202	14417	-10213	11862	-14355	05600	-03372	-11114
155.0000							-10356	1366		1217			-03336	
150.0000		7417	24651	-11330	-12085	-13091	-11231	13494	4297	2445	1955	-11152	-18771	-16053
165.0000			2172	-11603	-12335	-13268	-11632	13101	4882	4615	-10391	-11150	-21199	-16935
180.0000		6684	17115	-11871	-12593	-13402	-10231	2750	4964	4789	-14047	-11156	-3088	-1902
270.0000			.0426					.0144						

Year	1940	1950	1960	1970	1980	1990	2000	2010	2020
Population	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
Area	100	150	200	250	300	350	400	450	500
Volume	10	15	20	25	30	35	40	45	50

•

.000	-.0334	.0694	-.3447
30,000	-.0406	.0836	-.0058
60,000	-.0058	.1359	.0761
90,000	.0322	.2456	
120,000	.0967	.0034	.6211
150,000	.1259	.1932	.4443
180,000	.0956	.2806	.4530
210,000	.0693	.2344	.5442
240,000	.0617	.1955	.5966

DATE 08 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 CX+T12+S12N25+T10 EXTERNAL TANK (RB1732)

ALPHA(4) = -4.295 BETA(4) = -3.970

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PHI									
.000	1.1890	.8616	.4749	-.0077	-.3247	-.3809	-.4522	-.0759	.0321
30.000			.5197	.0297	-.2922	-.3565	-.4294	-.2478	.1367
60.000			.5896	.0996	-.2472	-.3130	-.3329	-.0505	.1944
90.000		1.0670	.6517	.1646	-.1948	-.2650	-.2812	.3783	.5448
120.000			.7080	.2118	-.1592	-.2330	-.2815	.1293	.4535
135.000								.0344	.2605
150.000			.7180	.2187	-.1532	-.2236	-.3298	-.0801	.3652
165.000				.2013	-.1648	-.2375	-.3355	-.1526	.3221
180.000	1.1890	1.0940	.6760	.1778	-.1852	-.2551	-.3419	-.0215	.2885
270.000		.8875							.5950

X/LT .7460 .8330 .9280

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PHI									
.000	1.1890	.8616	.4749	-.0077	-.3247	-.3809	-.4522	-.0759	.0321
30.000			.5197	.0297	-.2922	-.3565	-.4294	-.2478	.1367
60.000			.5896	.0996	-.2472	-.3130	-.3329	-.0505	.1944
90.000		1.0670	.6517	.1646	-.1948	-.2650	-.2812	.3783	.5448
120.000			.7080	.2118	-.1592	-.2330	-.2815	.1293	.4535
135.000								.0344	.2605
150.000			.7180	.2187	-.1532	-.2236	-.3298	-.0801	.3652
165.000				.2013	-.1648	-.2375	-.3355	-.1526	.3221
180.000	1.1890	1.0940	.6760	.1778	-.1852	-.2551	-.3419	-.0215	.2885
270.000		.8875							.5950

ALPHA(4) = -4.240 BETA(4) = -1.960

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PHI									
.000	1.1890	.8621	.4763	.0018	-.3235	-.3806	-.4512	-.1945	.1179
30.000			.5057	.0197	-.3047	-.3704	-.4402	-.2292	.1343
60.000			.5564	.0596	-.2708	-.3370	-.3471	-.0804	.2180
90.000		1.0250	.6135	.1173	-.2328	-.3021	-.2990	.2873	.5466
120.000			.6612	.1690	-.1966	-.2680	-.3466	.1364	.4737
135.000								.0868	.2837
150.000			.6919	.0920	-.1785	-.2455	-.3486	.0173	.3545
165.000				.1908	-.1739	-.2499	-.3396	-.0310	.3230
180.000	1.1890	1.0930	.5914	.1785	-.1824	-.2562	-.3432	.0139	.3011
270.000		.9344							.5864

X/LT .7460 .8330 .9280

PHI

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(R81732)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 4) = -4.240 BETA( 5) = -1.960

## DEPENDENT VARIABLE CP

## SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI  
 .000 -.0452 .0864 -.0907  
 30.000 -.0636 .0921 -.0045  
 60.000 -.0292 .1302 .0705  
 90.000 .0142 .1330  
 120.000 .0561 -.0055 .4792  
 135.000 .0468 .1385 .2945  
 150.000 .0236 .1619 .2544  
 165.000 .0481 .1781 .4585  
 180.000 .0264 .1537 .3741

ALPHA( 4) = -4.220 BETA( 6) = .020

## DEPENDENT VARIABLE CP

## SECTION ( 1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.2020 .8917 .4763 .0037 -.3177 -.3840 -.4507 -.2530 .1202 .1295 -.0976 -.2671 -.0381 .0365 -.0024  
 30.000 .4847 .0090 -.3177 -.3818 -.4484 -.2064 .1177 .0437 -.1949 -.2550 -.0513 .0102 -.0360  
 60.000 .5167 .0251 -.2960 -.3573 -.3954 -.0671 .2418 -.3021 -.4807 -.1328 -.0904 -.0694 -.0259  
 90.000 .5627 .0762 -.2643 -.3337 -.3162 .1897 .5525 -.5454 -.4949 -.0989 -.0657 -.0822  
 120.000 .6161 .1271 -.2274 -.2981 -.3800 .0994 .4920 .0798 .1124 .0207 -.0088 -.1057 -.1805  
 135.000 .6005 .1639 -.1981 -.2655 -.3687 .0364 .3124 .4125 .1290 -.1559 -.1240 -.2664 -.2600  
 150.000 .6827 .1783 -.1619 -.2592 -.3484 -.0604 .3162 .4566 .3697 -.1473 -.0999 -.2109 -.2032  
 165.000 1.2020 1.0920 .6827 .1837 -.1816 -.2526 -.3453 .0297 .2729 .4558 .4673 -.0142 -.0712 -.1844 -.1895  
 180.000 .9804 .5903

X/LT .7460 .8330 .9280

PHI  
 .000 -.0469 .0985 -.0404  
 30.000 -.0613 .0880 -.0234  
 60.000 -.0270 .1217 .0690  
 90.000 .0159 .1253  
 120.000 .0512 .0404 .3595  
 135.000 .0387 .1155 .2027  
 150.000 .0263 .1152 .1677  
 165.000 .0409 .1371 .2320  
 180.000 .0476 .1428 .1932



## DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-715 1A14 OR+T12+S12N25+AT10 EXTERNAL TANK

(RB1132)

ALPHA( 4 ) = -4.290 BETA( 7 ) = 2.020

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1970	.8904	.4748	.0019	-.3260	-.3665	-.3505	-.3187	.1363	.1230	-.1066	-.2739	-.0487	.0344	-.0075	
30.000			.4666	-.0097	-.3252	-.3911	-.4505	-.0786	.1068	.0807	-.1991	-.2902	-.0405	.0185	-.0231	
60.000			.4771	-.0002	-.3252	-.3797	-.4467	-.0519	.2531	-.2707	-.4762	-.1331	-.0721	-.0791	-.0533	
90.000		.9372	.9161	.0313	-.2931	-.3608	-.3478	.2588	.5666		-.4990	-.5143	-.1350	-.0796	-.0894	
120.000			.5709	.0602	-.2572	-.3249	-.3730	.0791	.3378	.1394	.0924	-.0124	-.0322	-.1345	-.1660	
135.000							.0999			.3057		-.0614		-.1817		
150.000			.6263	.1322	-.2200	-.2880	-.3886	.0904	.2960	.3880	.0604	-.2268	-.1783	-.2893	-.2446	
165.000			.1638	-.1961	-.2694	-.3565	-.0012		.3109	.4517	.3637	-.1240	-.0793	-.1869	-.1857	
180.000	1.1970	1.0940	.6803	.1817	-.1890	-.2551	-.3439	.0296	.2804	.4571	.4517	-.0306	-.0786	-.2029	-.2054	
270.000		1.0270							.5359							

X/LT .7460 .8530 .9280

PHI

.000	-.0526	.0821	-.0459
30.000	-.0438	.0875	-.0327
60.000	-.0219	.1165	.0761
90.000	.0152	.1227	
120.000	.0357	.0664	.2781
135.000	.0229	.0952	.1214
150.000	.0180	.0805	.0527
165.000	.0278	.1211	.2384
180.000	.0332	.1412	.1823

ALPHA( 4 ) = -4.310 BETA( 8 ) = 4.040

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1810	.8718	.4655	-.0090	-.3225	-.3847	-.4566	-.3775	.1178	.1155	-.1227	-.2894	-.0707	.0204	-.0225	
30.000			.4392	-.0379	-.3448	-.3987	-.4634	-.0766	.1102	.0964	-.2182	-.2840	-.0442	.0130	-.0240	
60.000			.4354	-.0379	-.3441	-.3931	-.4730	-.0479	.2851	-.2298	-.4687	-.1353	-.0638	-.0581	-.0750	
90.000		.8792	.4659	-.0067	-.3237	-.3847	-.3050	.0029	.9881		-.4700	-.4831	-.1369	-.0811	-.0922	
120.000			.5205	.0364	-.2900	-.3527	-.0096	.0676	.1839	.1963	.0876	-.0387	-.0666	-.1111	-.1727	
135.000							.0802			.2960		-.1004		-.2167		
150.000			.5915	.0985	-.2437	-.3118	-.3353	.0751	.2349	.3501	.0007	-.2727	-.2050	-.3322	-.2330	
165.000			.1524	-.2079	-.2783	-.3723	.0781		.2661	.4225	.3436	-.1169	-.0852	-.2041	-.1905	
180.000	1.1810	1.0890	.6765	.1808	-.1848	-.2542	-.3461	.0282	.2817	.4343	.4497	-.0743	-.0868	-.2435	-.2072	
270.000		1.0680							.5285							

X/LT .7460 .8530 .9280

PHI

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ARC11-716 1A14 01+712+S12N25+AT10 EXTERNAL TANK

(RB1732)

ALPHA( 4) = -4.310 BETA( 8) = 4.040

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9280

PHI	0.000	-0.011	.0672	-0.0406
30.000	-0.0187	.0813	-0.0377	
60.000	-0.0184	.0949	.0681	
90.000	-0.0120	.1034		
120.000	-0.0131	.0752	.2091	
135.000	-0.0087	.0831	.0781	
150.000	-0.0163	.0497	.0078	
165.000	-0.0122	.1061	.1598	
180.000	.0163	.1274	.1585	

ALPHA( 4) = -4.220 BETA( 9) = 8.060

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2153	.2420	.2900	.3440	.3940	.4310	.5050	.5590	.6380
PHI	1.1300	.8241	.4381	-.0312	-.3412	-.4047	-.4756	-.3990	.0675	.0237	-.1923	-.2491	-.1529	-.0500	-.0379
30.000			.3801	-.0757	-.3742	-.4337	-.4726	-.1258	.1219	.0716	-.2288	-.2797	-.0674	-.0104	-.0290
60.000			.3633	-.0839	-.3767	-.4362	-.2906	-.0321	.2088	-.1677	-.4219	-.1656	-.0635	-.0281	-.0351
90.000		.7826	.3763	-.0757	-.3757	-.4138	-.0377	-.0287	.3891	-.4728	-.3243	-.1683	-.1117	-.1089	
120.000			.4259	-.0381	-.3513	-.4085	.0026	-.0001	.1230	.1828	.0800	-.1194	-.1457	-.2234	-.1894
135.000			.5066	.0281	-.2990	-.3637	-.1410	-.0193	.1951	.3175	-.0047	-.3971	-.2829	-.4510	-.2479
150.000			.165.000	.1054	-.2430	-.3134	-.4041	.0243	.2125	.3679	.3129	-.1189	-.1813	-.2901	-.2267
180.000	1.1300	.9904	.6920	.1568	-.1976	-.2732	-.3609	-.0219	.2148	.3848	.4326	-.3611	-.2466	-.3240	-.2789
270.000		1.1400							.5272						

X/LT .7400 .8530 .9280

PHI	0.000	-0.0710	.0424	-0.0594
30.000	-0.0410	.0749	-0.0565	
60.000	-0.0376	.0824	.0346	
90.000	-0.0500	.0344		
120.000	-0.0360	.0264	.1756	
135.000	-0.0500	.0633	.0648	
150.000	-0.0611	.0190	-.0506	
165.000	-0.0583	.0588	.1689	
180.000	-0.0684	.0804	.1991	



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 Q1+T12+S12M25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 4 ) = -4.210 BETA( 10 ) = 10.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PMI															
.000	1.1000	.7929	.4176	-.0437	-.3560	-.4159	-.4882	-.5736	.0109	-.0425	-.2289	-.2162	-.1637	-.0845	-.0764
30.000			.3487	-.1006	-.4011	-.4557	-.4826	-.1041	.0304	.0320	-.2354	-.2470	-.0671	-.0156	-.0524
60.000			.3271	-.1230	-.4042	-.4557	-.0994	-.0803	.0122	-.1453	-.3690	-.1673	-.0617	-.0358	-.0764
90.000		.7344	.3350	-.1220	-.4049	-.1908	-.0595	-.0742	.3240	-.4560	-.3088	-.1561	-.1117	-.1425	
120.000			.3551	-.0716	-.3838	-.2996	-.0220	-.0371	.1236	.2036	.0883	-.1559	-.1685	-.2355	-.2386
135.000								-.0549		.2892	-.2327			-.3273	
150.000			.4697	-.0022	-.3316	-.3940	-.1478	-.0502	.1742	.2487	-.0263	-.4488	-.3583	-.4719	-.2839
165.000				.0815	-.2646	-.3155	-.4267	.0009	.1717	.3079	.3176	-.1691	-.2753	-.3294	-.2699
180.000	1.1000	.9678	.6398	.1481	-.2070	-.2794	-.3713	-.0081	.1686	.3436	.4172	-.3021	-.2815	-.3640	-.3491
270.000		1.1740							.5298						

K/LT .7480 .8330 .9280

PMI															
.000	-.0931	.0291	-.0742												
30.000	-.0454	.0726	-.0615												
60.000	-.0477	.0831	.0468												
90.000	-.0735	-.0039													
120.000	-.0541	.0561	.1577												
135.000	-.0647	.0561	.0445												
150.000	-.0729	.0020	-.0778												
165.000	-.0923	.0440	.1588												
180.000	-.1260	.0177	.1719												

ALPHA( 5 ) = -2.920 BETA( 1 ) = -10.000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0040	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PMI															
.000	1.1130	.8322	.4966	-.0093	-.3313	-.3906	-.4575	-.3919	.0514	-.0201	-.2174	-.2030	-.1833	-.0757	-.0785
30.000			.5866	.1116	-.2380	-.3153	-.3914	-.2159	-.0259	-.1953	-.3654	-.1281	-.1452	-.1491	-.0683
60.000			.7213	.2351	-.1398	-.2152	-.2221	.2094	.1684	-.3920	-.4370	-.2797	-.0677	.0309	-.0004
90.000		1.1830	.8128	.3227	-.0678	-.1478	-.1415	.4443	.5542	-.5821	-.5774	-.3917	-.0311	-.0145	
120.000			.8154	.3255	-.0652	-.1447	-.1610	.3233	.3699	-.1405	.1863	.2637	.1317	.0808	-.0212
135.000								.1846		.1016		.2041		.0188	
150.000			.7556	.2692	-.1125	-.1935	-.2680	.0622	.2337	.3575	.3695	.1105	-.0785	-.1608	-.0931
165.000			.1511	-.1787	-.2909	-.3385	-.2433	-.2433	.2028	.4263	.4728	.1128	-.0819	-.2371	-.1436
180.000	1.1130	.0370	.6091	.1880	-.2196	-.2906	-.3583	-.2225	.2028	.4421	.4444	-.3459	-.0925	-.3213	-.2303
270.000		.7406							.5180						

K/LT .7480 .8330 .9280

PMI															
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(RB1732)

ARC11-716 1A14 01+112+S12N2S+AT10 EXTERNAL TANK

ALPHA( 5) = -2.920 BETA( 1) = -10.000

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6330 .9280

PMI

.000 -.0792 .0357 -.0719  
 30.000 -.0614 .0598 -.0356  
 60.000 .0349 .1744 .0783  
 90.000 .0935 .0996  
 120.000 .1791 .0837 .7648  
 135.000 .1845 .2659 .5178  
 150.000 .1444 .2990 .5780  
 165.000 .1279 .2908 .6147  
 180.000 .0860 .2297 .4168

ALPHA( 5) = -2.930 BETA( 2) = -8.000

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.000 1.1510 .8671 .4782 .0005 -.3247 -.3866 -.4526 -.3672 .0982 .0349 -.1818 -.2256 -.1522 -.0536 -.0562  
 30.000 .5747 .0867 -.2531 -.3229 -.4006 -.2235 .0898 -.1342 -.3126 -.3124 -.1394 -.1223 -.0683  
 60.000 .6866 .1932 -.1726 -.2451 -.2594 .1344 .1834 -.3575 -.4639 -.2043 -.1233 .0324 -.0040  
 90.000 1.1510 .7829 .2671 -.1125 -.1901 -.2014 .4493 .5542 .5554 -.4018 -.0958 -.0343 -.0212  
 120.000 .7749 .2820 -.1023 -.1009 -.2166 .2490 .3903 -.1063 .1423 .2104 .0924 -.0081 -.0561  
 135.000 .7380 .2449 -.1351 -.2107 -.3015 -.1611 .2861 .3865 .2712 .1068 -.0803 -.1703 -.1149  
 150.000 .6254 .1881 -.1810 -.2523 -.3436 -.2576 .2556 .4484 .4586 .0345 -.0883 -.2088 -.1493  
 165.000 1.1510 1.0510 .6254 .1376 -.2129 -.2859 -.3638 -.0531 .2243 .4630 .4576 -.4116 -.0731 -.3113 -.1886  
 270.000 .7972

X/LT .7460 .6330 .9280

PMI

.000 -.0576 .0597 -.0333  
 30.000 -.0408 .0803 -.0238  
 60.000 .0175 .1670 .0838  
 90.000 .0781 .1451  
 120.000 .1399 .1008 .5689  
 135.000 .1476 .2547 .4807  
 150.000 .1201 .2848 .5363  
 165.000 .1165 .2766 .6074  
 180.000 .0790 .2269 .4105



ARC11-716 1A14 01+112+S12N25+AT10 EXTERNAL TANK (R81732)

ALPHA( 9 ) = -2.930 BETA( 3 ) = -5.975

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1810	.8977	.4920	.0100	-.3115	-.3736	-.4447	-.3460	.1240	.0757	-.1453	-.2556	-.1122	-.0089	-.0377
30.000			.5665	.0774	-.2628	-.3313	-.4083	-.2699	.1309	-.0777	-.2656	-.1345	-.1134	-.0875	-.0641
60.000			.6530	.1572	-.2014	-.2597	-.2948	.0369	.2132	-.3341	-.4756	-.1648	-.1606	-.0155	.0032
90.000		1.1140	.7174	.2212	-.1525	-.2281	-.2398	.4339	.5597	-.5324	-.4185	-.1002	-.0377	-.0323	
120.000			.7346	.2422	-.1398	-.2126	-.2624	.1468	.4099	-.0715	.1227	.1720	.0686	-.0282	-.0899
135.000							-.1035			.1970		.1160		-.0256	
150.000			.7162	.2184	-.1558	-.2279	-.3195	-.2310	.3191	.4504	.2202	.0778	-.0994	-.1774	-.1377
165.000				.1808	-.1861	-.2556	-.3478	-.2343	.2889	.4659	.4478	-.0435	-.1196	-.2102	-.1465
180.000	1.1810	1.0990	.6347	.1431	-.2103	-.2791	-.3606	-.0315	.2404	.4722	.4681	-.4255	-.1030	-.3025	-.1615
270.000		.8503													.6318

X/LT .7460 .8330 .9280

PHI

.000	-.0467	.0723	-.0410
30.000	-.0333	.0929	-.0067
60.000	.0012	.1560	.0788
90.000	.0544	.1629	
120.000	.1053	.0661	.6250
135.000	.1119	.2291	.4560
150.000	.0931	.2637	.4779
165.000	.1016	.2586	.5642
180.000	.0738	.2174	.3813

ALPHA( 9 ) = -2.910 BETA( 4 ) = -3.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1980	.9127	.5058	.0171	-.3034	-.3659	-.4336	-.2804	.1234	.1092	-.1188	-.2597	-.0772	.0218	-.0109
30.000			.5498	.0593	-.2726	-.3407	-.4163	-.2878	.1442	-.0209	-.2226	-.1642	-.0807	-.0419	-.0490
60.000			.6119	.1155	-.2319	-.2982	-.3271	-.0414	.2364	-.3086	-.4621	-.1393	-.1545	-.0146	.0073
90.000		1.0750	.6675	.1715	-.1929	-.2644	-.2745	.3470	.5642	-.5175	-.4399	-.1006	-.0399	-.0373	
120.000			.6933	.1989	-.1734	-.2471	-.2868	.0684	.4259	-.0319	.1020	.0469	-.0484	-.1180	
135.000							-.1049			.2275		.0838		-.0336	
150.000			.6910	.1978	-.1744	-.2471	-.3459	-.1702	.3448	.4119	.1450	.0205	-.1164	-.1950	-.1735
165.000				.1743	-.1896	-.2638	-.3538	-.1414	.2910	.4686	.4253	-.1129	-.1006	-.2128	-.1621
180.000	1.1980	1.0660	.6450	.1469	-.2087	-.2801	-.3592	-.0079	.2549	.4535	.4671	-.2892	-.1195	-.2141	-.1570
270.000		.8984													.6181

X/LT .7460 .8330 .9280

PHI

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ARC11-716 1A14 0L+T12+S12N25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 5) = -2.910 BETA( 4) = -3.980

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0431 .0751 -.0403  
 30.000 -.0475 .0957 .0056  
 60.000 -.0131 .1417 .0653  
 90.000 .0331 .1549  
 120.000 .0816 .0144 .6050  
 135.000 .0847 .1891 .4065  
 150.000 .0710 .2266 .4137  
 165.000 .0815 .2313 .4536  
 180.000 .0612 .2019 .3499

ALPHA( 5) = -2.910 BETA( 5) = -2.000

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
 PHI  
 .000 1.2090 .9226 .5071 .0225 -.3037 -.3630 -.4302 -.3782 .1415 .1395 -.1030 -.2547 -.0490 .0397 .0015  
 30.000 .5353 .0463 -.2871 -.3408 -.4238 -.3553 .1445 .0275 -.2120 -.0685 -.0005 -.0373  
 60.000 .5762 .0757 -.2651 -.3192 -.4078 -.3035 .2827 -.2837 -.4416 -.1160 -.1071 -.0582 -.0011  
 90.000 1.0340 .6204 .1228 -.2276 -.2991 -.3006 .2905 .5664 -.5144 -.4654 -.1084 -.0535 -.0577  
 120.000 .5491 .1537 -.2054 -.2780 -.3225 .0554 .4395 -.0014 .0856 .0714 .0289 -.0686 -.1430  
 135.000 .6665 .1652 -.1983 -.2650 -.3638 -.3205 .3275 .4212 .0879 -.1106 -.1027 -.2169 -.2099  
 150.000 .6800 .1616 -.1973 -.2703 -.3592 -.3065 .2775 .4568 .3922 -.1631 -.0911 -.2112 -.1665  
 180.000 1.2090 1.0660 .6480 .1342 -.2070 -.2790 -.3625 .2517 .4327 .4514 -.1080 -.0750 -.1901 -.1786  
 270.000 .9425 .5772

X/LT .7460 .8530 .9280

PHI  
 .000 -.0408 .0859 -.0398  
 30.000 -.0809 .0949 -.0012  
 60.000 -.0243 .1340 .0639  
 90.000 .0195 .1495  
 120.000 .0636 .0206 .5107  
 135.000 .0559 .1616 .3156  
 150.000 .0312 .1690 .2854  
 165.000 .0589 .2005 .4580  
 180.000 .0394 .1717 .3695



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4801

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

(R81732)

ALPHA( 5) = -2.910 BETA( 6) = .020

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2110	.3214	.5055	.0222	-.3010	-.3580	-.4419	-.3724	.1355	.1325	-.0984	-.2516	-.0414	.0406	.0014	
30.000			.5111	.0295	-.3020	-.3547	-.4353	-.2850	.1280	.0555	-.1926	-.2547	-.0445	.0175	-.0259	
60.000			.5342	.0394	-.2682	-.3455	-.4350	-.0179	.2591	-.2613	-.4392	-.1925	-.0686	-.0707	-.0261	
90.000	.9872		.5692	.0735	-.2540	-.3318	-.3149	.1573	.5889	-.5263	-.4882	-.0989	-.0649	-.0734		
120.000			.6053	.1108	-.2395	-.3085	-.3888	.0854	.4510	.0308	.0781	.0223	-.0020	-.0974	-.1678	
150.000								.0772		.2708		-.0313		-.1311		
190.000			.6363	.1377	-.2184	-.2841	-.3947	.0792	.2820	.4057	.1009	-.1497	-.1116	-.2315	-.2520	
165.000				.1507	-.2041	-.2816	-.3593	-.0255	.2820	.4288	.3644	-.1463	-.0958	-.2016	-.1905	
180.000	1.2110	1.0670	.6501	.1515	-.2069	-.2793	-.3680	-.0017	.2487	.4360	.4417	-.0427	-.0696	-.1729	-.1778	
270.000		.9908							.5630							

K/LT .7480 .8530 .9280

PMI																
.000	-.0306	.0931	-.0325													
30.000	-.0623	.0906	-.0220													
60.000	-.0292	.1264	.0617													
90.000	.0176	.1346														
120.000	.0581	.0687	.3374													
150.000	.0458	.1331	.2049													
180.000	.0300	.1307	.1769													
210.000	.0476	.1498	.2304													
270.000	.0543	.1520	.1928													

ALPHA( 5) = -2.910 BETA( 7) = 2.050

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.0000	1.2040	.9192	.9042	.0264	-.3075	-.3693	-.4369	-.3744	.1532	.1215	-.1054	-.2570	-.0575	.0357	-.0022	
30.000			.4950	.0184	-.3078	-.3777	-.4448	-.0877	.0981	.0935	-.1868	-.2987	-.0382	.0229	-.0171	
60.000			.4950	.0161	-.3121	-.3683	-.4492	-.0130	.2807	-.2326	-.4328	-.1013	-.0478	-.0335	-.0568	
90.000	.9399		.5193	.0348	-.2961	-.3603	-.3319	.0788	.5800	-.5407	-.5066	-.1185	-.0803	-.0797	-.0798	
120.000			.5572	.0663	-.2701	-.3360	-.4137	.0606	.4705	.0612	.0558	-.0250	-.0258	-.1252	-.1798	
150.000			.5997	.1044	-.2398	-.3069	-.4047	.0796	.2682	.2967	.0453	-.2194	-.1706	-.2763	-.2343	
180.000			.6329	.1329	-.2184	-.2939	-.3800	.0396	.2723	.4175	.3438	-.1329	-.0776	-.1769	-.1751	
210.000	1.2040	1.0620	.6440	.1447	-.2115	-.2822	-.3674	-.0015	.2518	.4298	.4293	-.0322	-.0675	-.1923	-.1917	
270.000		1.0321							.5591							

K/LT .7480 .8530 .9280

PMI

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DATE 06 JAN 73 TABULATED PRESSURE DATA - 1A1A - VOL. 9

(RB1T32)

ARC11-716 1A14 01+712+512N25+AT10 EXTERNAL TANK

ALPHA( 3) = -2.910 BETA( 7) = 2.030

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/T	.7480	.8530	.9280
PHI			
.000	-.0350	.0865	-.0400
30.000	-.0519	.0913	-.0294
60.000	-.0361	.1150	.0546
90.000	.0158	.1269	
120.000	.0404	.0888	.2812
135.000	.0304	.1088	.1272
150.000	.0280	.0991	.0597
165.000	.0321	.1341	.2400
180.000	.0399	.1548	.1972

ALPHA( 3) = -2.920 BETA( 8) = 4.080

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/T	.0000	.0080	.0490	.1135	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1900	.9041	.4967	.0111	-.3041	-.3370	-.4445	-.3937	.1379	.1237	-.1179	-.2533	-.0936	.0244	-.0141
30.000			.4929	-.0111	-.3322	-.3359	-.4529	-.0716	.1384	.0817	-.1901	-.3296	-.0907	.0193	-.0180
60.000			.0520	-.0265	-.3109	-.2877	-.4597	-.0292	.3241	-.1532	-.4220	-.1055	-.0427	-.0318	-.0636
90.000		.8893	.4711	-.0029	-.3260	-.2833	-.3650	.1172	.5864	-.5494	-.5201	-.1523	-.0985	-.0794	
120.000			.5120	.0273	-.2939	-.3602	-.1895	.0378	.2466	.1184	.0298	-.0456	-.0554	.1491	-.1669
135.000			.5717	.0723	-.2680	-.3286	-.3935	.0591	.2109	.3332	-.0253	-.2770	-.2000	.3100	-.2208
150.000				.1193	-.2300	-.3036	-.3909	.0542	.2368	.3861	.3284	-.1233	-.0878	.1969	-.1816
165.000	1.1900	1.0630	.6446	.1469	-.2104	-.2309	-.3583	.0365	.2568	.4064	.4330	-.1342	-.0839	-.2374	-.1958
180.000		1.0780							.5490						

X/T	.7480	.8530	.9280
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PHI			
.000	-.0496	.0685	-.0390
30.000	-.0261	.0678	-.0331
60.000	-.0264	.0945	.0491
90.000	.0175	.1205	
120.000	.0201	.0912	.2064
135.000	.0911	.0994	.0905
150.000	-.0371	.0685	.0210
165.000	.0227	.1230	.1796
180.000	.0256	.1430	.1858



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4803

ARC11-716 1A14 2A+T12+S12+25+A\*10 EXTERNAL TANK

(R01732)

ALPHA( 9 ) = -2.930 BETA( 9 ) = 5.073

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/L	.0000	.0000	.0400	.1100	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5500	.6300
PHI															
.000	1.1690	.0000	.4863	.0031	-.3117	-.3791	-.4486	-.3978	.1187	.0936	-.1417	-.2598	-.1592	-.0099	-.0420
30.000			.4347	-.0367	-.3434	-.4072	-.4565	-.2922	.1949	.0933	-.2099	-.3406	-.0645	-.0030	-.0204
60.000			.4142	-.0630	-.3544	-.4103	-.4664	-.0507	.3499	.1623	-.4132	-.1297	-.0590	-.0282	-.0303
90.000		.0305	.4230	-.0413	-.3526	-.4087	-.3687	-.0114	.5164		-.5224	-.4536	-.1846	-.1101	-.0037
120.000			.4622	-.0077	-.3324	-.3978	-.0193	.0179	.1167	.1736	.0083	-.0096	-.0977	-.1870	-.1824
150.000								.0404		.1942		-.1545		-.8348	
180.000			.3266	.0411	-.2877	-.3536	-.0423	.0414	.1854	.3156	-.0234	-.3504	-.2262	-.3679	-.2093
165.000				.0931	-.2499	-.3189	-.4042	.0420	.2111	.3613	.3023	-.1135	-.1223	-.2191	-.1950
180.000	1.1690	1.0220	.6297	.1359	-.2108	-.2975	-.3793	.0000	.2392	.3867	.4314	-.3795	-.1779	-.2429	-.2225
270.000		1.1240							.7493						
K/L	.7460	.6500	.9280												

ALPHA( 9 ) = -2.920 BETA( 10 ) = 8.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/L	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5500	.6300
PHI															
.000	1.1490	.0001	.4686	-.0086	-.3240	-.3877	-.4590	-.4074	.0834	.0406	-.1709	-.2317	-.1910	-.0979	-.0574
30.000			.4015	-.0503	-.3627	-.4226	-.4692	-.1984	.1234	.0952	-.2150	-.3079	-.0892	-.0137	-.0107
60.000			.3774	-.0863	-.3760	-.4284	-.5017	-.0655	.2472	-.1316	-.4055	-.1575	-.0703	-.0194	-.0395
90.000		.7933	.3799	-.0740	-.3760	-.4311	-.0600	-.0465	.5660		-.4711	-.3842	-.1978	-.1812	-.0931
120.000			.4191	-.0443	-.3551	-.4132	-.0122	-.0027	.0680	.1794	.0245	-.1262	-.1354	-.2171	-.1818
150.000								.0111		.2744		-.1957		-.2760	
180.000			.4903	.0101	-.3131	-.3747	-.0277	.0088	.1422	.2905	-.0168	-.4031	-.2709	-.4241	-.2355
165.000				.0768	-.2634	-.3330	-.4177	.0188	.1702	.3349	.2900	-.1246	-.1608	-.2753	-.2156
180.000	1.1490	.9643	.5211	.1279	-.2219	-.2941	-.3704	.0324	.1969	.3451	.4134	-.3543	-.2417	-.3802	-.2611
270.000		1.1970							.5401						
K/L	.7480	.6530	.9280												

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DATE 08 JAN 75 TABULATED PRESSURE DATA - IAL14 - VOL. 9

(R81132)

ARC11-716 IAL14 OF 712-912N23-AT10 EXTERNAL TANK

ALPHA( 5) = -2.920 BETAD (10) = 8.110

SECTION ( 1) EXTERNAL TANK

W/LT .7400 .8330 .9200

PHI  
 .000 -.0617 .0491 -.0560  
 30.000 -.0403 .0608 -.0444  
 60.000 -.0366 .0947 .0613  
 90.000 -.0363 .0622  
 120.000 -.0152 .0496 .2096  
 135.000 -.0332 .0626 .0652  
 150.000 -.0424 .0403 -.0376  
 165.000 -.0421 .0749 .1921  
 180.000 -.0507 .0762 .2116

ALPHA( 5) = -2.900 BETAD (11) = 10.100

SECTION ( 1) EXTERNAL TANK

W/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6280

PHI  
 .000 1.1180 .8316 .4494 -.0190 .0339 -.4014 -.4754 -.4063 .0222 -.0265 -.2168 -.2084 -.2081 -.0741  
 30.000 .3684 .0875 .3332 .4431 -.5035 -.1033 .0828 .0748 -.2323 -.2683 -.0678 -.0161 -.0454  
 60.000 .3325 -.1196 .4037 .4504 -.1179 -.0501 .0931 .0931 .1046 .3771 .1941 .0639 .0177 .0676  
 90.000 .3325 .1174 .4360 .4420 .0536 .0621 .4523 .4523 .4985 .3303 .1633 .0984 .1409  
 120.000 .3773 .0603 .3869 .4063 .0235 .0125 .0379 .0379 .1473 .0445 .1612 .1716 .2350 .2221  
 135.000 .4516 .0251 .3415 .4025 .0510 .0382 .1236 .1236 .3006 .0484 .4484 .3588 .4313 .2708  
 150.000 .0545 .2648 .3548 .4424 .0037 .1470 .2819 .2819 .2378 .1791 .2715 .3250 .3250 .2614  
 165.000 .6110 .1192 .2320 .3047 .3932 .0563 .1457 .3122 .3905 .3093 .2878 .3628 .3339  
 180.000 1.1900 .5480

W/LT .7400 .8330 .9200

PHI  
 .000 -.0689 .0284 -.0777  
 30.000 -.0327 .0732 -.0551  
 60.000 -.0494 .0910 .0587  
 90.000 -.0675 .0320  
 120.000 -.0421 .0276 .1742  
 135.000 -.0335 .0712 .0621  
 150.000 -.0345 .0192 -.0756  
 165.000 -.0726 .0984 .1750  
 180.000 -.1064 .0309 .1614



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01732)

ARC11-716 1A14 0A+712+S12N23+AT10 EXTERNAL TANK

ALPHA( 6 ) = -.793 BETA( 1 ) = -10.040

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5090	.5980	.6380
PMI																
.000	1.1190	.8785	.9075	.0299	-.3054	-.3723	-.4506	-.3830	.0801	-.0204	-.2040	-.1823	-.2049	-.1243	-.0760	
30.000			.6427	.1587	-.2010	-.2772	-.3625	-.0766	.0180	-.1656	-.3234	-.1111	-.1332	-.1542	-.0646	
60.000			.7695	.2752	-.1098	-.1848	-.1925	.2487	.2308	-.3305	-.3224	-.2369	-.0807	.0381	.0085	
90.000	1.1990		.8258	.3318	-.0617	-.1438	-.1316	.4479	.5654	-.5669	-.3614	-.1446	-.1446	-.0434	-.0036	
120.000			.7918	.2996	-.0911	-.1163	-.1881	.2794	.3053	-.2290	.0129	.2969	.1662	.0449	.0187	
150.000								.1636		-.0413		.2085		.0317		
180.000			.7077	.2199	-.11572	-.2322	-.3025	-.0031	.1639	.2902	.3290	.0593	-.0487	-.1432	-.0653	
210.000	1.1190	.9932	.1344	-.2248	-.2993	-.3820	-.2897	.1382	.3902	.4291	.1090	-.0331	-.2231	-.1037		
	.7440		.5555	.0726	-.2678	-.3369	-.3908	-.2487	.1539	.4037	.4165	-.3523	-.1233	-.2775	-.1732	
X/LT	.7480	.8330	.9280						.6711							

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ALPHA( 6 ) = -.740 BETA( 2 ) = -8.040

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5090	.5980	.6380
PMI																
.000	1.1940	.8139	.5255	.0458	-.2893	-.3541	-.4233	-.3554	.1195	.0426	-.1609	-.1899	-.1741	-.0795	-.0547	
30.000			.6322	.1443	-.2116	-.2845	-.3658	-.1613	.1077	-.0956	-.2840	-.1067	-.1116	-.1279	-.0661	
60.000			.7261	.2348	-.1412	-.2149	-.2457	.1590	.2469	-.2993	-.3405	-.1435	-.1323	.0113	.0085	
90.000	1.1610		.7754	.2796	-.1047	-.1811	-.1853	.4443	.5823	-.5354	-.3988	-.1328	-.0542	-.0136		
120.000			.7901	.2596	-.1228	-.2016	-.2338	.1808	.3267	-.1912	.0098	.2286	.1321	.0182	-.0225	
150.000								-.1271		.0442		.1283		.0082		
180.000			.6902	.2008	-.1705	-.2455	-.3333	-.2490	.2229	.3153	.2509	.0908	-.0904	-.1435	-.0844	
210.000	1.1940	1.0010	.1323	-.2241	-.2919	-.3791	-.2878	.1960	.3955	.4248	.0470	-.0313	-.1831	-.0994		
	.7967		.0782	-.2372	-.3338	-.3976	-.0672	.1857	.4158	.4327	-.4042	-.1064	-.2816	-.1446		
								.6915								

PMI

ARC11-716 1A14 GA+712+512N25+AT10 EXTERNAL TANK

(RB1732)

ALPHA( 6 ) = -.740 BETA( 2 ) = -8.040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8330 .9200

PMI	0.000	-0.011	0.073	-0.062
30.000	-0.0240	0.0916	-0.0274	
60.000	0.0311	-0.0886	0.0674	
90.000	0.0634	-0.1559		
120.000	0.1334	-0.1371	0.7350	
150.000	0.1611	0.2911	0.9025	
180.000	0.1304	-0.504	0.5529	
210.000	0.1379	0.3060	0.8224	
240.000	0.1031	-0.2556	0.4136	

ALPHA( 6 ) = -.720 BETA( 3 ) = -5.990

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .6200 .0080 .0490 .1130 .1760 .1941 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6300

PMI	0.000	1.1640	0.9432	0.5462	0.027	-0.2806	-0.3472	-0.4201	-0.3451	0.0812	-0.1295	-0.2174	-0.1404	-0.0211	-0.0326
30.000	0.0230	0.1277	-0.2290	-0.2997	-0.3779	-0.2640									
60.000	0.0899	0.1945	-0.1743	-0.2455	-0.3451	0.1732									
90.000	0.1280	0.2276	-0.1496	-0.2251	-0.2332	0.4015									
120.000	0.1756	0.2139	-0.1021	-0.2381	-0.2441	0.3556									
150.000	0.1900	0.1728	-0.1963	-0.2973	-0.2215										
180.000	0.1650	0.1246	-0.2320	-0.2997	-0.2864										
210.000	0.1800	0.0817	-0.2540	-0.3250	-0.3993										
240.000	0.1910	0.0497													

X/LT .7400 .8330 .9200

PMI	0.000	-0.0339	0.0714	-0.0459
30.000	-0.0342	0.1050	-0.0164	
60.000	0.0103	-0.1731	0.0758	
90.000	0.0994	-0.1623		
120.000	0.1155	-0.1439	0.6415	
150.000	0.1237	0.2745	0.4658	
180.000	0.1117	0.2933	0.5076	
210.000	0.1207	0.2884	0.5729	
240.000	0.0956	-0.2476	0.3950	



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4807

ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK

(R81732)

ALPHA( 6 ) = -.710 BETA( 4 ) = -3.980

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2030	.9617	.5569	.0602	-.2686	-.3362	-.4139	-.3547	.1606	.1210	-.1070	-.2295	-.1070	.0179	-.0077
30.000			.6045	.1098	-.2365	-.3056	-.3846	-.3180	.1681	.0107	-.2070	-.1517	-.0609	-.0280	-.0380
60.000			.6490	.1566	-.2049	-.2697	-.3694	.0564	.2952	-.2476	-.3753	-.0985	-.0791	-.0635	.0090
90.000		1.0850	.6780	.1799	-.1853	-.2597	-.2724	.2823	.5753	-.5119	-.4718	-.1302	-.0610	-.0259	
120.000			.6693	.1743	-.1911	-.2620	-.3136	.0009	.3703	-.1178	-.0342	.1212	.0834	-.0213	-.0898
135.000								-.2445		.1538		.0375		-.0303	
150.000			.6455	.1523	-.2108	-.2809	-.3694	-.2982	.2910	.3607	.1242	-.0128	-.0625	-.1655	-.1425
165.000				.1168	-.2340	-.2995	-.3889	-.1936	.2400	.4259	.3985	-.1011	-.0607	-.1895	-.1283
180.000	1.2030	1.0140	.5862	.0858	-.2495	-.3176	-.3948	-.0216	.2066	.4113	.4500	-.3322	-.0835	-.1846	-.1511
270.000		.8992							.6338						

X/LT .7460 .8330 .9280

PHI

.000	-.0391	.0795	-.0345
30.000	-.0440	.0983	-.0015
60.000	-.0039	.1571	.0678
90.000	.0439	.1591	
120.000	.0942	.1012	.6029
135.000	.0981	.2400	.4288
150.000	.0906	.2661	.4507
165.000	.0994	.2701	.4903
180.000	.0839	.2389	.3638

ALPHA( 6 ) = -.700 BETA( 5 ) = -2.010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2140	.9752	.5628	.0632	-.2647	-.3317	-.4076	-.3604	.1669	.1510	-.0859	-.2255	-.0748	.0432	.0082
30.000			.5882	.0873	-.2479	-.3159	-.3956	-.3268	.1805	.0619	-.1749	-.2027	-.0341	.0156	-.0143
60.000			.6117	.1126	-.2303	-.2953	-.3928	.0345	.3238	-.2206	-.3070	-.0950	-.0206	-.0616	-.0169
90.000		1.0440	.6281	.1315	-.2217	-.2905	-.3125	.1973	.5764	-.5191	-.4814	-.1370	-.0712	-.0369	
120.000			.6291	.1325	-.2227	-.2907	-.3265	-.0481	.3854	-.0817	-.0365	.0656	.0653	-.0411	-.1139
135.000								-.1657		.1950		-.0174		-.0565	
150.000			.6217	.1202	-.2286	-.2968	-.3913	-.2273	.3081	.3757	.0728	-.1346	-.0601	-.1840	-.1789
165.000				.1047	-.2357	-.3052	-.3938	-.0903	.2303	.4273	.3735	-.1758	-.0557	-.1822	-.1312
180.000	1.2140	1.0150	.5926	.0875	-.2479	-.3144	-.3980	-.0259	.2134	.3963	.4326	-.2141	-.0344	-.1443	-.1513
270.000		.9453							.6227						

X/LT .7460 .8330 .9280

PHI

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ARC11-716 1A14 01+T12+S12M25+AT10 EXTERNAL TANK

(R81732)

ALPHA( 6) = -.700 BETA( 5) = -2.010

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8330	.9280
PHI			
.000	-.0453	.0936	-.0138
30.000	-.0315	.0876	-.0097
60.000	-.0203	.1404	.0582
90.000	.0310	.1471	
120.000	.0774	.0836	.3299
135.000	.0725	.2101	.3526
150.000	.0493	.2265	.3423
165.000	.0753	.2375	.4645
180.000	.0573	.2067	.3750

ALPHA( 6) = -.690 BETA( 6) = .040

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2180	.9762	.5629	.0301	-.2590	-.3340	-.4087	-.3606	.1593	.1453	-.0795	-.2192	-.0669	.0442	.0128
30.000			.5645	.0601	-.2677	-.3381	-.4080	-.3500	.1415	.0979	-.1655	-.2389	-.0435	.0306	-.0018
60.000			.5673	.0532	-.2654	-.3292	-.4199	.0147	.3583	-.1935	.3531	-.1118	-.0159	-.0159	-.0329
90.000		.9934	.5744	.0778	-.2639	-.3271	-.3420	.1591	.5882	-.5361	-.4411	-.1335	-.0815	-.0559	
120.000			.5800	.0858	-.2596	-.3236	-.3456	-.0128	.3982	-.0422	-.0502	.0167	.0247	-.0704	-.1399
135.000								-.0290		.2137		-.0739		-.0986	
150.000			.5941	.0863	-.2537	-.3187	-.4106	-.0389	.2537	.3940	.0369	-.1710	-.0681	-.2087	-.2164
165.000				.0925	-.2456	-.3164	-.4024	.0163	.2260	.3946	.3256	-.1567	-.0590	-.1656	-.1636
180.000	1.2180	1.0140	.5949	.0920	-.2479	-.3169	-.4029	-.0192	.2186	.3844	.3982	-.0806	-.0404	-.1345	-.1471
270.000		.9969							.5965						

X/LT .7460 .8330 .9280

PHI

X/LT	.7460	.8330	.9280
PHI			
.000	-.0468	.0913	-.0202
30.000	-.0476	.0934	-.0070
60.000	-.0413	.1249	.0494
90.000	.0235	.1303	
120.000	.0674	.0934	.4034
135.000	.0602	.1581	.2167
150.000	.0426	.1568	.2178
165.000	.0653	.1756	.2193
180.000	.0692	.1734	.1853



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4009

ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 6) = -.690 BETA( 7) = 2.030

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.2100	.9698	.5567	.0389	-.2711	-.3330	-.4089	-.3539	.1846	.1323	-.0637	-.2260	-.0783	.0375	.0035
30.000			.5362	.0384	-.2879	-.3549	-.4227	-.3940	.1211	.1071	-.1687	-.2677	-.0416	.0293	-.0075
60.000			.5244	.0310	-.2917	-.3569	-.4423	.0161	.3727	-.1688	-.3531	-.1229	-.0256	-.0056	-.0376
90.000		.9481	.5240	.0379	-.2935	-.3805	-.3575	.1407	.5953	-.5545	-.4139	-.1484	-.0841	-.0897	
120.000			.5350	.0474	-.2894	-.3548	-.3889	.0440	.3915	-.0135	-.0639	-.0194	-.0187	-.1046	-.1538
135.000								.0353	.2269			-.1172		-.1374	
150.000			.5598	.0607	-.2723	-.3365	-.4284	.0435	.2003	.3588	.0521	-.2501	-.1346	-.2380	-.2097
165.000				.0785	-.2568	-.3296	-.4090	.0463	.2103	.3607	.3003	-.5356	-.0610	-.1534	-.1318
180.000	1.2100	1.0130	.5914	.0877	-.2502	-.3202	-.4026	.0075	.2085	.3696	.3930	-.0969	-.0478	-.1672	-.1652
270.000		1.0390							.5795						

X/LT .7460 .8530 .9280

PHI

.000	-.0532	.0931	-.0225												
30.000	-.0498	.1058	-.0163												
60.000	-.0418	.1174	.0330												
90.000	.0204	.1218													
120.000	.0538	.1205	.2597												
135.000	.0430	.1362	.1331												
150.000	.0403	.1207	.0704												
165.000	.0452	.1571	.2463												
180.000	.0547	.1795	.1839												

ALPHA( 6) = -.710 BETA( 8) = 4.060

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.2010	.9580	.5485	.0574	-.2676	-.3380	-.4124	-.3608	.1776	.1292	-.1020	-.2317	-.1150	.0276	-.0056
30.000			.5019	.0239	-.3033	-.3655	-.4305	-.3217	.2160	.1051	-.1759	-.2906	-.0587	.0265	-.0076
60.000			.4791	.0067	-.3181	-.3739	-.4565	-.0095	.3730	-.1366	-.3406	-.1298	-.0413	-.0060	-.0300
90.000		.8965	.4755	.0085	-.3155	-.3808	-.3770	.0898	.6040	-.5416	-.3165	-.1206	-.0990	-.0688	
120.000			.4926	.0157	-.3155	-.3745	-.4354	.0124	.3894	.0183	-.0579	-.0499	-.0436	-.1233	-.1472
135.000								.0122	.2506			-.1412		-.1624	
150.000			.5290	.0379	-.2890	-.3497	-.4390	.0252	.1533	.3099	-.0255	-.3038	-.1686	-.2740	-.2031
165.000			.0684	-.2658	-.3344	-.4184	.0337	.2026	.3455	.2999	-.1410	-.0809	-.1649	-.1558	
180.000	1.2010	1.0170	.5909	.0930	-.2487	-.3174	-.3999	.0024	.2283	.3682	.4131	-.2442	-.0553	-.2148	-.1684
270.000		1.0870							.5692						

X/LT .7460 .8530 .9280

PHI

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(RB1T32)

ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 6 ) = -.710 BETA( 8 ) = 4.060

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PMI  
.000 -.0449 .0749 -.0325  
30.000 -.0271 .1023 -.0229  
60.000 -.0171 .1136 .0376  
90.000 .0256 .1229  
120.000 .0387 .1162 .2144  
135.000 .0184 .1224 .1088  
150.000 .0108 .0940 .0361  
165.000 .0399 .1428 .2005  
180.000 .0445 .1647 .2082

ALPHA( 6 ) = -.720 BETA( 9 ) = 6.080

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI  
.000 1.1810 .9435 .5431 .0538 -.2765 -.3458 -.4215 -.3704 .1484 .1020 .1237 .2200 .1712 .0192 .0264  
30.000 .4747 -.0023 -.3178 -.3835 -.4293 -.3712 .2191 .1074 .1074 .1789 .3041 .0782 .0040 .0130  
60.000 .4393 -.0367 -.3438 .3934 .4756 .0189 .2854 .1122 .3253 .1546 .0533 .0161 .0336  
90.000 .8472 .4281 .0449 .3415 .4039 .4106 .0857 .6059 .5345 .2982 .1268 .0949 .0757  
120.000 .4483 -.0115 .3349 .3555 .2715 .0351 .2869 .0553 .0707 .0871 .0746 .1491 .1404  
135.000 .4970 .0100 .3053 .3687 .2003 .0070 .1434 .2998 .0383 .3750 .1946 .3322 .1864  
150.000 .0512 .2806 .3489 .4310 .0150 .1801 .3224 .2818 .1320 .1136 .2016 .1711  
165.000 .5777 .0829 .2569 .3247 .4068 .0114 .1960 .3432 .3997 .3950 .1387 .2342 .1996  
180.000 1.1810 .9947 .5777 .0829 .2569 .3247 .4068 .0114 .1960 .3432 .3997 .3950 .1387 .2342 .1996  
270.000 1.1300

X/LT .7460 .8330 .9280

PMI  
.000 -.0904 .0660 -.0453  
30.000 -.0140 .0954 .0344  
60.000 .0094 .1070 .0459  
90.000 .0140 .1248  
120.000 .0104 .1075 .2457  
135.000 .0051 .1119 .1129  
150.000 .0034 .0771 .0024  
165.000 .0082 .1173 .2161  
180.000 .0108 .1294 .2465



TABULATED PRESSURE DATA - 1A14A - VOL. 9

DATE 06 JAN 75

(R81732)

ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK

ALPHA( 6) = -.730 BETA( 10) = 8.100

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3540	.4510	.5050	.5580	.6380
PHI	.000	1.1500	.9089	.5217	.0367	-.2864	-.3523	-.4284	-.3865	.0980	.0513	-.1538	-.1937	-.2033	-.0752
30.000				.4368	-.0315	-.3467	-.4073	-.4419	-.2490	.1455	.0913	-.1882	-.3169	-.0980	-.0144
60.000				.3962	-.0685	-.3588	-.4215	-.4940	-.0285	.2371	-.0963	-.3408	-.1597	-.0561	-.0175
90.000			.7959	.3844	-.0804	-.3593	-.4294	-.4335	.0521	.6057		-.5467	-.4583	-.1726	-.0716
120.000				.4031	-.0523	-.3527	-.4210	-.0890	-.0529	.1163	.1025	-.1006	-.1427	-.1027	-.1581
150.000								-.0279		.1409		-.2206			-.2362
180.000				.4575	-.0205	-.3355	-.3961	-.0494	.1284	.2938	-.0369	-.4293	-.2465	-.3753	-.2123
210.000					.0295	-.2981	-.3633	-.3949	.1658	.3032	.2556	-.1608	-.1288	-.2406	-.1994
240.000				.5673	.0782	-.2625	-.3305	-.4163	.1668	.3032	.3751	-.3829	-.2209	-.3025	-.2477
270.000			1.1640					.0216	.5584						

X/LT .7460 .8530 .9280

PHI	.000	-.0532	.0527	-.0620
30.000		-.0333	.0843	-.0436
60.000		-.0315	.1010	.0581
90.000		-.0097	.1102	
120.000		.0021	.0776	.2898
150.000		-.0159	.1097	.1252
180.000		-.0175	.0704	-.0076
210.000		-.0136	.0969	.2194
240.000		-.0277	.0982	.2284

ALPHA( 6) = -.740 BETA( 11) = 10.160

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3540	.4510	.5050	.5580	.6380
PHI	.000	1.1210	.6754	.5904	.0225	-.2980	-.3708	-.4488	-.3857	.0219	-.0125	-.1950	-.1846	-.2255	-.1240
30.000				.4002	-.0650	-.3687	-.4355	-.4961	-.0920	.0951	.0526	-.2087	-.2862	-.1175	-.0282
60.000				.3552	-.1101	-.3934	-.4490	-.3935	-.0541	.1709	-.0544	-.3382	-.1650	-.0711	-.0459
90.000			.7499	.3404	-.1137	-.3924	-.4539	-.1539	-.0773	.6465		-.5211	-.3742	-.1654	-.0965
120.000				.3601	-.0921	-.3891	-.4470	-.0755	-.0630	.0057	.1405	-.0855	-.1880	-.1444	-.2228
150.000								-.0356		.0534		-.2477			-.2679
180.000				.4210	-.0503	-.3562	-.4202	-.0510	-.0287	.1141	.2769	-.0259	-.4468	-.3314	-.3969
210.000					.0120	-.3117	-.3833	-.2803	-.0294	.1377	.2550	.2411	-.1911	-.2322	-.2968
240.000				.5577	.0698	-.2634	-.3408	-.4225	.0476	.1128	.2647	.3445	-.3195	-.2755	-.3394
270.000			1.1980						.5622						

X/LT .7460 .8530 .9280

PHI	.000	.7460	.8530	.9280
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(RB1732)

ARC11-71.6 1A14 01+T12+S12N23+AT10 EXTERNAL TANK

ALPHA0( 6) = -.740 BETA0 (11) = 10.160

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000 -.0786 .0303 -.0831  
 30.000 -.0488 .0786 -.0320  
 60.000 -.0571 .1026 .0705  
 90.000 -.0442 .0838  
 120.000 -.0149 .0583 .2470  
 135.000 -.0344 .1087 .0996  
 150.000 -.0364 .0993 -.0385  
 165.000 -.0322 .0855 .2089  
 180.000 -.0820 .0553 .2017

ALPHA0( 7) = 2.030 BETA0 ( 1) = -10.000

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000 1.1190 .9374 .5676 .0923 -.2536 -.3246 -.4042 -.3368 .0785 -.0023 -.1580 -.1603 -.2013 -.1630 -.0799  
 30.000 .7580 .2258 -.1489 -.2261 -.3128 -.0272 .3076 -.2405 -.1931 -.0918 -.1031 -.1194 -.1194 -.0773  
 60.000 .4100 .3203 -.0734 -.1470 -.2564 .2495 .3076 -.2405 -.1172 -.1010 -.0027 .0235  
 90.000 1.1980 .8252 .3326 -.0619 -.1424 -.1281 .4417 .5520 -.4133 -.4487 .3120 -.0944 -.0169  
 120.000 .7460 .2598 -.1244 -.1993 -.2234 .2344 .2107 -.3157 -.4157 .1612 .2616 .1053 .0482  
 135.000 .6400 .1997 -.2030 -.2764 -.3528 -.1659 .0938 -.1896 .2435 -.0205 .0379 -.1035 -.0433  
 150.000 .165.000 .0711 -.2707 -.3437 -.4177 -.3322 .0907 .3362 .3690 .0784 .0382 -.1811 -.0653  
 180.000 1.1190 .9335 .4909 .0167 -.3107 -.3730 -.3886 -.2447 .3379 .3621 .3688 -.0896 -.2235 -.1558  
 270.000 .7416 .5885

X/LT .7460 .8530 .9280

PHI

.000 -.0563 .0172 -.0934  
 30.000 -.0042 .0878 -.0503  
 60.000 .0765 .2195 .0922  
 90.000 .1140 .1265  
 120.000 .2148 .2175 .0321  
 135.000 .2217 .3585 .5749  
 150.000 .1876 .3662 .6339  
 165.000 .1816 .3528 .5656  
 180.000 .1414 .2950 .4499



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK (RB1732)

ALPHA( 7 ) = 2.000 BETA( 2 ) = -8.030

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1520	.9720	.5922	.1093	-.2382	-.3068	-.3845	-.3226	.1493	.3552	-.1263	-.1601	-.1643	-.1006	-.0598	
30.000			.7038	.2100	-.1586	-.2340	-.3213	-.1369	.1411	-.3436	-.1771	-.0844	-.0768	-.0936	-.0585	
60.000			.7721	.2785	-.1026	-.1773	-.2844	.1940	.3217	-.2242	-.2428	-.0839	-.0616	-.0317	.0197	
90.000	1.1490		.7764	.2825	-.1521	-.1794	-.2245	.4117	.5512	-.4230	-.4468	-.3211	-.1113	-.0178		
120.000			.7054	.2184	-.1553	-.2315	-.2844	.1708	.2284	-.2876	-.4033	.1021	.2230	.0760	.0263	
135.000								-.1597		-.1039		.0195		.0480		
150.000			.6241	.1364	-.2193	-.2890	-.3786	-.2987	.1471	.2390	.2371	-.0689	.0388	-.1085	-.0512	
165.000				.0668	-.2743	-.3411	-.4189	-.3331	.1489	.3552	.3749	.0144	.0206	-.1474	-.0589	
180.000	1.1520	.9398	.5052	.0187	-.3022	-.3655	-.4377	-.0822	.1630	.3726	.4003	-.4101	-.1117	-.2547	-.1055	
270.000		.7910														

X/LT .7460 .6530 .9280

PHI																
.000	-.0414	.0487	-.0709													
30.000	-.0100	.1104	-.0287													
60.000	.0563	.2095	.0966													
90.000	.0960	.1394	.3072													
120.000	.1729	.1836	.3072													
135.000	.1798	.3349	.5444													
150.000	.1592	.3480	.5953													
165.000	.1654	.3448	.6135													
180.000	.1315	.2849	.4175													

ALPHA( 7 ) = 2.000 BETA( 3 ) = -5.990

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1780	1.0070	.6121	.1188	-.2301	-.3015	-.3810	-.3182	.1908	.1019	-.1004	-.1741	-.1412	-.0403	-.0210	
30.000			.6900	.1936	-.1745	-.2490	-.3354	-.2689	.1921	.0095	-.1727	-.0994	-.0693	-.0356	-.0287	
60.000			.7338	.2359	-.1386	-.2100	-.3167	.1444	.3409	-.1981	-.2548	-.0792	-.0207	-.0346	-.0030	
90.000	1.1210		.7248	.2302	-.1462	-.2204	-.3164	.3178	.5547	-.4491	-.4416	-.3185	-.1273	-.0231		
120.000			.6670	.1756	-.1944	-.2630	-.3252	.0303	.2619	-.2600	-.3610	.0450	.1863	.0319	-.0077	
135.000								-.2565		-.0282		-.0909		.0260		
150.000			.5996	.1093	-.2416	-.3088	-.3941	-.3008	.1938	.2774	.2230	-.1035	.0313	-.1134	-.0705	
165.000				.0543	-.2836	-.3466	-.4232	-.3005	.1766	.3599	.3820	-.0400	.0013	-.1326	-.0656	
180.000	1.1780	.9433	.5112	.0166	-.2992	-.3843	-.4347	-.0223	.1392	.3646	.4168	-.4359	-.0789	-.1175	-.0870	
270.000		.8419							.6350							

X/LT .7460 .6530 .9280

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A144 - VOL. 9

(RB1132)

ARC11-716 1A14 Q1+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 7 ) = 2.000 BETA( 3 ) = -5.990

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
.000 -.0336 .0692 -.0530  
30.000 -.0187 .1088 -.0228  
60.000 .0726 .1864 .0761  
90.000 .0719 .1333  
120.000 .1327 .1871 .0963  
150.000 .1422 .3149 .4846  
180.000 .1325 .3211 .5346  
210.000 .1446 .3208 .5851  
240.000 .1215 .2757 .4011

ALPHA( 7 ) = 5.940 BETA( 4 ) = -4.010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0090 .0490 .1130 .1780 .1940 .2150 .2420 .2930 .3440 .3940 .4510 .5090 .5580 .6380

PHI  
.000 1.2030 1.0240 .6253 .1228 -.2229 -.2939 -.3744 -.3245 .2112 .1493 -.0678 -.1769 -.1372 .0139 .0084  
30.000 .6573 .1666 -.1923 -.2660 -.3459 -.2779 .2132 .0609 -.1310 -.1468 -.0634 -.0231 -.0013  
60.000 .6893 .1884 -.1750 .2446 -.3452 .0988 .3547 -.1722 .2593 .1059 .0259 .0162 .0143  
90.000 .6752 .1794 -.1852 .2591 -.3465 .2261 .5664 .2261 .5664 .2261 .5664 .2261 .5664 .2261 .5664  
120.000 .6289 .1369 .2185 .2889 -.3480 .0768 .2968 .2968 .2968 .2968 .2968 .2968 .2968 .2968  
150.000 .5956 .0985 .2503 .3214 .4012 .3173 .2328 .3128 .1751 .1191 .0390 .1149 .1046  
180.000 .5533 .0533 .2770 .3433 .4251 .3742 .1857 .3713 .3746 .0981 .0020 .1296 .0811  
210.000 .5227 .0277 .2909 .3576 .4310 .4129 .1429 .3446 .4180 .3410 .0424 .1208 .1092  
240.000 .4975 .0975 .2950 .3750 .4550 .4350 .1650 .3650 .4450 .3650 .0650 .1450 .1350

X/LT .7460 .8530 .9280

PHI  
.000 -.0251 .0791 .0053  
30.000 -.0218 .0999 .0030  
60.000 .0028 .1339 .0601  
90.000 .0498 .1277  
120.000 .1072 .1594 .6202  
150.000 .1162 .2839 .4387  
180.000 .1128 .2960 .4732  
210.000 .1269 .2950 .5123  
240.000 .1066 .2600 .3707



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4615

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

(081132)

ALPHA( 7) = 1.950 BETA( 5) = -2.000

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.500	1.2140	1.0340	.6260	.1272	-.2186	-.2903	-.3594	-.3195	.1982	.1696	-.0519	-.1748	-.1196	.0393	.0260
30.000			.6464	.1442	-.2002	-.2812	-.3588	-.3109	.2263	.0979	-.1287	-.1665	-.0644	.0100	.0132
60.000			.6447	.1447	-.2082	-.2754	-.3746	-.0687	.3521	-.1436	-.2472	-.1144	.0111	.0259	.0143
90.000		1.0390	.6234	.1269	-.2174	-.2901	-.3782	.1413	.5775	-.1751	-.5287	-.1372	-.0512	-.0480	-.0398
120.000			.5697	.0960	-.2440	-.3131	-.3600	-.0966	.3235	-.1751	-.2503	.0041	.1169	.0010	-.0797
135.000								-.2500		.1025	-.1284			-.0231	
150.000			.5637	.0681	-.2670	-.3325	-.4192	-.2105	.2320	.3298	.0845	-.1584	.0177	-.1302	-.1389
165.000				.0467	-.2815	-.3442	-.4246	.0021	.1478	.3609	.3356	-.1520	-.0117	-.1233	-.0931
180.000	1.2140	.9556	.5290	.0332	-.2909	-.3522	-.4272	.0033	.1550	.3274	.3891	-.1419	-.0299	-.0924	-.1121
270.000		.9490						.0033	.6036						

X/LT .7460 .8530 .9280

PHI

.000	-.0274	.0815	.0150
30.000	-.0251	.0982	.0256
60.000	-.0089	.1482	.0731
90.000	.0310	.1580	
120.000	.0917	.1606	.5088
135.000	.0091	.2518	.3044
150.000	.0725	.2567	.3683
165.000	.1005	.2614	.4739
180.000	.0846	.2247	.3705

ALPHA( 7) = 1.950 BETA( 6) = .040

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.000	1.2150	1.0360	.6277	.1252	-.2188	-.2913	-.3753	-.3249	.2071	.1677	-.0488	-.1761	-.1032	.0420	.0270
30.000			.6208	.1163	-.2313	-.2997	-.3804	-.3046	.1828	.1254	-.1331	-.1829	-.0603	.0271	.0108
60.000			.5966	.0981	-.2435	-.3065	-.4011	.0567	.3543	-.1170	-.2906	-.1052	-.0032	.0232	-.0007
90.000		.9892	.5734	.0754	-.2613	-.3266	-.4085	.0967	.5929	-.1339	-.5962	-.0785	-.0447	-.0584	-.0563
120.000			.5476	.0559	-.2789	-.3447	-.3609	-.0719	.3299	-.1339	-.2139	.0027	.0643	-.0408	-.1053
135.000								-.0402		.1426	-.1219			-.0615	
150.000			.5399	.0439	-.2871	-.3516	-.4399	.0078	.2101	.3305	.0105	-.1842	-.0300	-.1537	-.1701
165.000				.0387	-.2963	-.3559	-.4358	.0192	.1626	.3379	.2956	-.1504	-.0287	-.1188	-.1198
180.000	1.2150	.9508	.5279	.0363	-.2914	-.3593	-.4363	-.0072	.1593	.3366	.3612	-.1052	-.0241	-.0894	-.1038
270.000		.9925							.5853						

X/LT .7460 .8530 .9280

PHI

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DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1132)

ARC11-716 1A14 01+712+512+25+AT10 EXTERNAL TANK

ALPHA( 7 ) = 1.930 BETA( 6 ) = .040

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9260

PHI	
.000	-.0274 .0716 .0017
30.000	-.0262 .1048 .0179
60.000	-.0230 .1329 .0723
90.000	.0257 .1391
120.000	.0629 .1540 .3621
135.000	.0747 .1665 .2193
150.000	.0379 .1810 .2266
165.000	.0844 .1943 .2193
180.000	.0678 .1949 .1871

ALPHA( 7 ) = 1.930 BETA( 7 ) = 2.030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI	
.000	1.2110 1.0310 .6210 .1242 -.2214 -.2948 -.3723 -.3245 .2497 .1583 -.0567 -.1743 -.1217 .0375 .0260
30.000	.5868 .0877 -.2478 -.3172 -.3921 -.3214 .2025 .1307 -.1356 -.2012 -.0775 .0262 .0155
60.000	.5518 .0538 -.2709 -.3362 -.4243 .0318 .3302 -.0807 -.2430 -.1199 .0240 .0109 -.0022
90.000	.9449 .5233 .0293 -.2925 -.3530 -.4212 .6197 .6197 .0438 .0438 .0353 -.0475 -.0602
120.000	.5172 .0111 -.2707 -.3657 -.3690 -.0360 .3428 -.1004 -.1775 -.0067 .0265 -.0997 -.1118
135.000	.5129 .0308 -.3009 -.3629 -.4316 -.0068 .1629 .3245 .0308 -.2460 -.0741 -.1730 -.1666
150.000	.0312 -.2956 -.3596 -.4385 .0066 .1606 .3248 .2716 -.1494 -.0276 -.0996 -.1063
165.000	.5320 .0361 -.2935 -.3525 -.4346 .0078 .1571 .3305 .3699 -.1064 -.0201 -.1032 -.1166
180.000	1.0390 .5725

X/LT .7460 .8530 .9260

PHI	
.000	-.0306 .0825 .0161
30.000	-.0327 .1026 .0038
60.000	-.0253 .1280 .0778
90.000	.0292 .1433
120.000	.0743 .1427 .2623
135.000	.0699 .1636 .1441
150.000	.0663 .1465 .0907
165.000	.0728 .1840 .2569
180.000	.0810 .2090 .1991

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4817

ARC11-716 1A14 OR+112+S12+23+AT10 EXTERNAL TANK

(RB1132)

ALPHA( 7 ) = 1.000 BETA( 8 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1980	1.0140	.6106	.1172	-.2268	-.3006	-.3787	-.3279	.2207	.1438	-.0703	-.1833	-.1537	.0159	.0092
30.000			.5510	.0614	-.2688	-.3362	-.4070	-.3400	.2733	.1330	-.1509	-.2179	-.0996	.0172	.0061
60.000			.5052	.0194	-.3021	-.3603	-.4461	.0258	.2064	-.0391	-.2404	-.1302	-.0543	-.0092	-.0172
90.000		.8933	.4749	.0028	-.3210	-.3792	-.1858	.0125	.6411	-.6301	-.0461	-.0584	-.0825	-.0757	
120.000			.4680	-.0021	-.3253	-.3874	-.3960	.0072	.3404	-.0603	-.1590	-.0318	-.0072	-.0842	-.1229
135.000								-.0215	.2061		-.1574			-.1152	
150.000			.4849	.0023	-.3227	-.3754	-.4574	-.0141	.1351	.3127	-.0241	-.3168	-.1138	-.2154	-.1751
165.000				.0201	-.3342	-.3680	-.4479	.0010	.1615	.3224	.2636	-.1563	-.0558	-.1147	-.1221
180.000	1.1980	.9552	.5279	.0365	-.2925	-.3578	-.4368	-.0115	.1666	.3344	.3744	-.1871	-.0323	-.1452	-.1273
270.000		1.0850													

K/LT .7480 .8330 .9280

PMI

.000	-.0294	.0881	.0105												
30.000	-.0202	.1100	-.0034												
60.000	-.0179	.1180	.0653												
90.000	.0301	.1420													
120.000	.0581	.1399	.2162												
135.000	.0450	.1505	.1139												
150.000	.0397	.1139	.0584												
165.000	.0627	.1668	.2227												
180.000	.0688	.1903	.2289												

ALPHA( 7 ) = 1.000 BETA( 9 ) = 6.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1780	1.0010	.6049	.1153	-.2322	-.3051	-.3845	-.3358	.1677	.1058	-.0950	-.1812	-.1514	-.0434	-.0187
30.000			.5208	.0360	-.2942	-.3608	-.4081	-.3662	.2484	.1336	-.1553	-.2204	-.1064	-.0094	-.0083
60.000			.4582	-.0141	-.3270	-.3880	-.3615	-.0033	.2039	-.0193	-.2396	-.1579	-.0792	-.0387	-.0344
90.000		.8447	.4259	-.0413	-.3471	-.4020	-.0619	-.0172	.6188	-.6244	-.0941	-.0766	-.0718	-.0796	
120.000			.4218	-.0469	-.3502	-.4084	-.4107	-.0335	.2871	-.0190	-.1424	-.0733	-.0475	-.1113	-.1242
135.000								-.0474	.2199		-.1823			-.1439	
150.000			.4497	-.0210	-.3369	-.3924	-.3150	-.0366	.1010	.2822	-.0644	-.3757	-.1511	-.2683	-.1725
165.000				.0504	-.3153	-.3812	-.4622	-.0305	.1446	.2955	.2570	-.1802	-.0922	-.1343	-.1394
180.000	1.1780	.9359	.5128	.0244	-.3008	-.3649	-.4429	-.0174	.1648	.2975	.3559	-.3656	-.0919	-.1875	-.1598
270.000		1.1250													

K/LT .7480 .8330 .9280

PMI

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ARC11-716 IAL14 01+712+512N25+AT116 EXTERNAL TANK (R8113E)

ALPHA(1) = 1.980 BETA( 9 ) = 6.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7480 .6550 .9280

PHI			
.000	-.3341	.0637	-.0514
30.000	-.0171	.0972	-.0165
60.000	-.0130	.1070	.0463
90.000	.0832	.1392	
120.000	.0991	.1346	.2202
150.000	.0298	.1364	.1182
180.000	.0136	.1013	.0582
195.000	.0357	.1357	.2320
200.000	.0411	.1486	.2632

ALPHA( 7 ) = 1.980 BETA( 10 ) = 6.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0060 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580

PHI													
.000	1.1520	.9705	.5884	.1003	-.2391	-.3137	-.3934	-.3470	.1056	.0474	-.1263	-.1674	-.1796
30.000			.4815	.0026	-.3197	-.3845	-.4323	-.3722	.1655	.1193	-.1548	-.2102	-.1296
60.000			.4118	-.0530	-.3578	-.4160	-.3059	-.0317	.2387	-.0306	-.2480	-.1685	-.0975
90.000		.7949	.3795	-.0780	-.3718	-.4287	-.0422	-.0340	.5416		-.5502	-.1355	-.0972
120.000			.3800	-.0736	-.3748	-.4305	-.1530	-.0594	.1683	.0208	-.1186	-.1166	-.0840
150.000								-.0556	.1894		-.2187		-.1821
180.000			.4162	-.0510	-.3565	-.4162	-.1292	-.0568	.0971	.2716	-.0622	-.4273	-.1932
195.000				-.0191	-.3352	-.4007	-.4635	-.0568	.1293	.2689	.2285	-.1863	-.1330
200.000	1.1520	.8490	.5538	.0210	-.3080	-.3728	-.4489	-.0222	.1178	.2620	.3375	-.4025	-.1732
210.000	1.1690								.5529				-.2571

W/LT .7480 .6550 .9280

PHI			
.000	-.0448	.0441	-.0738
30.000	-.0162	.0765	-.0482
60.000	-.0227	.1001	.0557
90.000	.0003	.1284	
120.000	.0290	.1240	.2480
150.000	.0162	.1345	.1213
180.000	.0030	.0927	-.0087
195.000	.0089	.1112	.2464
200.000	-.0021	.1159	.2480

TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 21+712+512+5+AT10 EXTERNAL TANK (NB1732)

ALPHA( 7 ) = 1.940 BETA( 11 ) = 10.140

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/L	0.000	0.080	0.490	1.130	1.730	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.080
PMI	0.000	1.1170	.5349	.5628	.0677	-.2519	-.3241	-.4068	-.3497	.0322	-.0188	-.1609	-.1643	-.2095	-.1127
30.000				.4372	-.0265	-.3389	-.4080	-.4771	-.3257	.1041	-.1090	-.1578	-.2005	-.1563	-.0579
60.000				.3549	-.0885	-.3902	-.4405	-.5357	-.0518	.2556	-.0377	-.2357	-.1788	-.1214	-.0801
90.000			.7446	.3388	-.1116	-.3931	-.4431	-.5595	-.0505	.4948	-.0569	-.4652	-.1713	-.1139	-.0976
120.000				.2419	-.1109	-.3969	-.4459	-.5525	-.0454	.0831	.0569	-.0994	-.1659	-.1137	-.1601
150.000									-.0366	.1169	.1169	-.2470	-.2206	-.2206	
180.000				.3843	-.0800	-.3893	-.4377	-.5074	.0068	.2291	-.0424	-.4472	-.2570	-.3487	-.2097
210.000					-.0379	-.3516	-.4108	-.5229	.0489	.2105	-.2029	-.2144	-.1753	-.2576	-.1915
240.000			.7983	.4965	.0095	-.3130	-.3801	-.4574	.0073	.2095	.2956	-.3575	-.2133	-.3145	-.2640
270.000			1.1983						.5573						

W/L

.7460 .8330 .9280

PMI

0.000	-.0627	.0175	-.0945
30.000	-.0452	.0382	-.0586
60.000	-.0314	.0993	.0451
90.000	-.0339	.1159	
120.000	.0080	.057	.2540
150.000	-.0104	.1306	.1192
180.000	-.0067	.0785	-.0208
210.000	-.0231	.1084	.2420
240.000	-.0483	.0776	.2145

ALPHA( 8 ) = 3.970 BETA( 1 ) = -9.990

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/L	0.000	0.080	0.490	1.130	1.730	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.080
PMI	0.000	1.1070	.9700	.6159	.1392	-.2176	-.2918	-.3756	-.3044	.1061	.0122	-.1333	-.1385	-.1644	-.1388
30.000				.7539	.2717	-.1111	-.1894	-.2786	.0219	.1187	-.0680	-.1408	-.0632	-.0658	-.0797
60.000				.6232	.3472	-.0476	-.1221	-.2353	.2775	.3191	-.0321	-.1925	-.0619	-.0074	.0079
90.000		1.1690		.6195	.3390	-.0529	-.1433	-.2413	.3981	.5311	-.0431	-.3559	-.3116	-.2093	-.0428
120.000				.7082	.2265	-.1159	-.2277	-.3557	.1776	.1293	-.3716	-.4671	-.1150	.2952	.1607
150.000									.0327	.1120	-.2740	-.0311	.1120		
180.000				.6886	.1134	-.2419	-.3512	-.5884	-.1042	.0027	.1794	.1728	.3973	.0699	-.0308
210.000				.0263	-.3074	-.3767	-.4394	-.3521	.0550	.3146	.3421	.0374	.0286	-.1216	-.0378
240.000		1.1070	.8814	.4441	-.0303	-.3443	-.4040	-.4103	.1333	.3479	.3712	-.3817	-.0375	-.1776	-.1461
270.000			.7302						.5172						

W/L

.7460 .8330 .9280

PMI

0.000	-.0627	.0175	-.0945
30.000	-.0452	.0382	-.0586
60.000	-.0314	.0993	.0451
90.000	-.0339	.1159	
120.000	.0080	.057	.2540
150.000	-.0104	.1306	.1192
180.000	-.0067	.0785	-.0208
210.000	-.0231	.1084	.2420
240.000	-.0483	.0776	.2145

ARC11-716 IAI14 01+712+S12M5+AT10 EXTERNAL TANK

(R81732)

ALPHA( 8 ) = 3.970 BETA( 1 ) = -9.990

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

M/LT .7480 .8530 .9280

Psi

.000	-.0490	.0125	-.1124
30.000	.0136	.0997	-.0377
60.000	.0907	.2246	.0635
90.000	.0940	.0807	
120.000	.2374	.2429	.8638
135.000	.2463	.3634	.9981
150.000	.2032	.3832	.5543
165.000	.1996	.3662	.6568
180.000	.1566	.2315	.4414

ALPHA( 8 ) = 3.990 BETA( 2 ) = -8.000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

M/LT .0000 .0080 .0490 .1130 .1790 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5380 .6380

Psi

.000	1.1430	1.0140	.6379	.1535	-.2015	-.2767	-.3599	-.2384	.1635	.0732	-.0970	-.1490	-.1417	-.0875	-.0308
30.000			.7462	.2539	-.1226	-.2202	-.2905	-.1548	.1774	-.0082	-.1169	-.0836	-.0522	-.0349	
60.000			.7978	.3019	-.0819	-.1592	-.2671	.2492	.3621	-.1743	-.1916	-.0725	.0324	.0137	-.0018
90.000		1.1490	.7676	.2779	-.1043	-.1831	-.2807	.3517	.5291		-.3776	-.2246	-.2391	-.1967	-.0654
120.000			.6716	.1849	-.1819	-.2572	-.3393	.1453	.1837	-.3449	-.4543	-.1339	.2261	.1262	.0550
135.000								-.1042		-.1722		-.1477		.0662	
150.000			.5746	.0906	-.2534	-.3236	-.4038	.3092	.1088	.2281	.1303	-.1622	.0670	-.0695	-.0292
165.000				.0242	-.3086	-.3724	-.4277	-.3554	.1184	.3307	.3456	-.0154	.0329	-.1131	-.0335
180.000	1.1430	.8937	.4572	-.0200	-.3322	-.3958	-.4526	-.0831	.1450	.3464	.3894	-.4180	-.0823	-.1709	-.0867
270.000		.7835													.6112

M/LT .7480 .8530 .9280

Psi

.000	-.0280	.0423	-.0726
30.000	.0068	.1137	-.0361
60.000	.0576	.2025	.0678
90.000	.0719	.0536	
120.000	.1933	.2192	.8168
135.000	.2028	.3567	.5580
150.000	.1801	.3621	.6044
165.000	.1880	.3536	.6146
180.000	.1500	.2921	.4263



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-71.6 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (R811732)

ALPHA( 8 ) = 3.970 BETA( 3 ) = -6.020

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1680	1.0450	.6389	.1677	-.1948	-.2657	-.3496	-.2349	.2099	.1180	-.0621	-.1524	-.1252	-.0425	-.0090
	30.000			.7340	.2356	-.1404	-.2134	-.3045	-.2291	.2229	.0448	-.1092	-.1226	-.0630	-.0204	.0026
	50.000			.7552	.2561	-.1219	-.1951	-.2990	.1819	.3752	-.1444	-.1976	-.1257	.0255	.0424	.0359
	90.000		1.1080	.7174	.2249	-.1506	-.2240	-.3180	.2829	.5324		-.4151	-.1798	.0481	-.0582	-.0229
	120.000			.6303	.1435	-.2146	-.2850	-.3712	.0917	.2034	-.2873	-.3965	-.1759	.1660	.1025	.0193
	135.000								-.2625		-.0608		-.2151		.0687	
	150.000			.5527	.0672	-.2721	-.3382	-.4157	-.3255	.1505	.2613	.1679	-.1995	.0396	-.0643	-.0507
	165.000				.0131	-.3117	-.3776	-.4152	-.2332	.1439	.3398	.3449	-.0482	.0248	-.0619	-.0414
	180.000	1.1680	.8966	.4670	-.0150	-.3267	-.3908	-.4604	-.0237	.1078	.3316	.3956	-.4267	-.0428	-.0940	-.0700
	270.000		.8336							.6302						

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X/LT .7460 .8530 .9280

PHI	.000	-.0089	.0871	-.0065
	30.000	.0103	.1194	.0043
	60.000	.0395	.1775	.0657
	90.000	.0669	.1145	
	120.000	.1424	.2271	.7042
	135.000	.1578	.3293	.4873
	150.000	.1570	.3303	.5384
	165.000	.1628	.3280	.5813
	180.000	.1330	.2808	.3941

ALPHA( 8 ) = 3.930 BETA( 4 ) = -3.990

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1930	1.0660	.6715	.1713	-.1865	-.2596	-.3440	-.2975	.2332	.1681	-.0410	-.1514	-.1063	.0080	.0244
	30.000			.7115	.2106	-.1593	-.2342	-.3186	-.2419	.2650	.0921	-.1023	-.1328	-.0652	.0147	.0241
	60.000			.7097	.2111	-.1583	-.2286	-.3316	.0903	.3934	-.1194	-.1841	-.1310	.0157	.0455	.0354
	90.000		1.0700	.6672	.1738	-.1901	-.2632	-.3522	.2108	.5468		-.4395	-.2242	.0419	-.0066	-.0222
	120.000			.5962	.1057	-.2437	-.3133	-.3941	.0696	.2434	-.2712	-.3595	-.1711	.1391	.0785	-.0189
	135.000								-.2428		-.0054		-.2504		.0469	
	150.000			.5405	.0487	-.2834	-.3504	-.3918	-.1567	.1758	.2697	.1495	-.2105	.0419	-.0657	-.0800
	165.000				.0145	-.3088	-.3725	-.4491	-.0258	.1185	.3187	.3231	-.0962	.0124	-.0505	-.0575
	180.000	1.1930	.9060	.4762	-.0087	-.3225	-.3850	-.4568	-.0169	.0873	.2896	.3720	-.2450	-.0322	-.0797	-.0892
	270.000		.8674							.6021						

X/LT .7460 .8530 .9280

PHI	.000	-.0089	.0871	-.0065
	30.000	.0103	.1194	.0043
	60.000	.0395	.1775	.0657
	90.000	.0669	.1145	
	120.000	.1424	.2271	.7042
	135.000	.1578	.3293	.4873
	150.000	.1570	.3303	.5384
	165.000	.1628	.3280	.5813
	180.000	.1330	.2808	.3941

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4822

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 8 ) = 3.930 BETA( 4 ) = -3.990

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.000	-.0133	.0772	.0240
30.000	-.0010	.1065	.0292
60.000	.0213	.1636	.0801
90.000	.0529	.1564	
120.000	.1177	.2183	.0860
135.000	.1310	.3008	.4236
150.000	.1261	.3008	.4562
165.000	.1415	.3051	.5094
180.000	.1217	.2624	.3701

ALPHA( 8 ) = 3.930 BETA( 5 ) = -2.000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.000	1.2080	1.0780	.6763	.1784	-.1867	-.2595	-.3430	-.2947	.2273	.1838	-.0316	-.1456	-.0945	.0249	.0396
30.000			.6894	.1881	-.1847	-.2529	-.3369	-.2860	.2314	.1328	-.1075	-.1415	-.0563	.0223	.0324
60.000			.6653	.1659	-.1951	-.2641	-.3615	.0215	.4143	-.0977	-.1767	-.1202	-.0003	.0277	.0262
90.000	1.0270		.6177	.1259	-.2259	-.2984	-.3843	.1414	.5557	-.4608	-.2084	.0156	-.0258	-.0353	
120.000			.5598	.0684	-.2692	-.3341	-.3848	.0659	.2617	-.2482	-.3370	-.1371	.1037	.0398	-.0487
135.000			.5210	.0313	-.2957	-.3621	-.3710	-.0684	.1589	.2657	.0865	-.2032	.0238	-.0854	-.0980
150.000			.4795	.0131	-.3176	-.3756	-.3846	-.0058	.0874	.2966	.2966	-.1259	-.0008	-.0567	-.0649
165.000	1.2080	.9091	.4795	.0000	-.3234	-.3817	-.2955	-.0091	.0969	.2777	.3435	-.1329	-.0353	-.0521	-.0696
180.000		.9370							.5745						

X/LT .7480 .8530 .9280

PMI

.000	-.0109	.0791	.0314
30.000	-.0068	.1056	.0412
60.000	.0040	.1470	.0905
90.000	.0317	.1514	
120.000	.0999	.2080	.4718
135.000	.1043	.2669	.3419
150.000	.0848	.2612	.3527
165.000	.1126	.2665	.4571
180.000	.1002	.2282	.3467



DATE 06 JAN 73

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4823

ARC11-716 IA14 01+T12+S12N23+AT10 EXTERNAL TANK (R81732)

ALPHA0( 6) = 3.940 BETA0 ( 6) = .040

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.2050	1.0770	.6746	.1761	-.1836	-.2554	-.3415	-.2934	.2336	.1853	-.0264	-.1336	-.0892	.0304	.0429
30.000			.6580	.1593	-.2014	-.2722	-.3537	-.3067	.2325	.1475	-.1069	-.1429	-.0596	.0199	.0319
60.000			.6156	.1192	-.2286	-.2940	-.3683	.0591	.3925	-.0620	-.1688	-.0964	-.0123	.0192	.0183
90.000		.9760	.5661	.0718	-.2619	-.3293	-.4137	.1028	.5655		-.4983	-.1884	-.0258	-.0537	-.0447
120.000			.5165	.0328	-.2961	-.3537	-.3750	.0458	.2642	-.2190	-.3000	-.1150	.0619	.0002	-.0649
135.000								-.0251		.0901		-.2192		-.0193	
150.000			.4947	.0152	-.3166	-.3755	-.4425	-.0169	.1531	.2594	.0457	-.2106	-.0304	-.1065	-.1267
165.000				.0134	-.3169	-.3606	-.4059	-.0041	.0959	.2741	.2710	-.1331	-.0192	-.0581	-.0727
180.000	1.2050	.9010	.4812	.0100	-.3182	-.3834	-.4304	-.0072	.1084	.2776	.3351	-.1194	-.0271	-.0431	-.0600
270.000		.9839							.5534						

X/LT .7460 .8530 .9280

PHI

.000	-.0066	.0549	.0312
30.000	-.0079	.0731	.0286
60.000	-.0054	.1227	.0851
90.000	.0330	.1219	
120.000	.0988	.1848	.3266
135.000	.0873	.2104	.2185
150.000	.0778	.1961	.2116
165.000	.1029	.2144	.2596
180.000	.1070	.2147	.2301

ALPHA0( 6) = 4.030 BETA0 ( 7) = 2.050

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.1990	1.0750	.6732	.1729	-.1861	-.2595	-.3432	-.2933	.2921	.1792	-.0339	-.1471	-.0911	.0237	.0394
30.000			.6262	.1285	-.2210	-.2949	-.3699	-.3169	.2741	.1610	-.1354	-.1499	-.0733	.0166	.0269
60.000			.5580	.0718	-.2614	-.3272	-.4211	.0567	.3383	-.0239	-.2064	-.0647	-.0368	-.0009	.0036
90.000		.9278	.5127	.0255	-.2947	-.3643	-.4415	.0418	.5827		-.5373	-.1349	-.0793	-.0728	-.0490
120.000			.4743	.0005	-.3242	-.3867	-.3972	.0384	.2595	-.1728	-.2872	-.0507	.0222	-.0398	-.0835
135.000								-.0345		.1346		-.1958		-.0488	
150.000			.4705	-.0082	-.3290	-.3692	-.4724	-.0385	.1439	.2967	-.0007	-.2575	-.0696	-.1277	-.1297
165.000				-.0073	-.3265	-.3892	-.4636	-.0309	.1364	.3142	.2473	-.1805	-.0340	-.0661	-.0721
180.000	1.1990	.8984	.4745	-.0065	-.3280	-.3874	-.4587	-.0281	.1382	.3039	.3326	-.1302	-.0342	-.0340	-.0794
270.000		1.0290							.5460						

X/LT .7460 .8530 .9280

PHI

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81132)

ARC11-716 1A14 Q1+T12+S12+25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 4.030 BETA( 7 ) = 2.050

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PMI

.000 -.0111 .0816 .0311  
30.000 -.0158 .1103 .0182  
60.000 -.0165 .1301 .0640  
90.000 .0409 .1203  
120.000 .0904 .1663 .2711  
135.000 .0850 .1827 .1575  
150.000 .0820 .1637 .1087  
175.000 .0915 .2010 .2634  
180.000 .0987 .2197 .2077

ALPHA( 8 ) = 4.020 BETA( 8 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

1.1880 1.0980 .5593 .1672 -.1921 -.2667 -.3451 -.2940 .2522 .1589 -.0450 -.1575 -.1230 .0010 .0191  
30.000 .5874 .0966 -.2478 -.3161 -.3909 -.3158 .3329 .1592 -.1447 -.1725 -.0966 .0013 .0121  
60.000 .5182 .0339 -.2931 -.3340 -.4391 .0164 .4000 -.0110 -.2206 -.0775 -.0575 -.0162 -.0120  
90.000 .8799 .4646 -.0037 -.3252 -.3855 -.4599 .0177 .5854 -.5300 -.1178 -.1070 -.0921 -.0490  
120.000 .4372 -.0321 -.3430 -.4021 -.3996 .0068 .2443 -.1322 -.2703 -.0672 -.0134 -.0692 -.0909  
135.000 .4446 -.0375 -.3466 -.4013 -.4646 -.0521 .1320 .2950 -.0165 -.3426 -.1013 -.1799 -.1487  
150.000 .4791 -.0215 -.3387 -.3967 -.4697 -.0311 .1394 .3089 .2341 -.1849 -.0624 -.0828 -.0873  
165.000 1.1880 .9032 .4791 -.0128 -.3272 -.3863 -.4646 -.0208 .1525 .3082 .3417 -.1875 -.0466  
180.000 1.0770 .5402

X/LT .7460 .8530 .9280

PMI

.000 -.0172 .0763 .0253  
30.000 -.0146 .1128 .0150  
60.000 .0049 .1223 .0477  
90.000 .0900 .1223  
120.000 .0749 .1542 .2171  
135.000 .0598 .1350 .1238  
150.000 .0552 .1211 .0618  
165.000 .0758 .1773 .2249  
180.000 .0602 .1965 .2393



(RB1732)

ARC11-716 1A14 01+112+S12N25+AT10 EXTERNAL TANK

ALPHA(8) = 4.010 BETA(9) = 6.080

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1730	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1700	1.0490	.6572	.1545	-.1957	-.2686	-.3542	-.3051	.1877	.1245	-.0610	-.1571	-.1477	-.0462	-.0055
30.000			.5566	.0693	-.2678	-.3377	-.4116	-.3337	.3048	.1530	-.1426	-.1875	-.1184	-.0240	-.0030
60.000			.4714	-.0066	-.3270	-.3868	-.4111	-.0223	.3903	-.0104	-.2380	-.0969	-.0792	-.0307	-.0210
90.000		.8340	.4198	-.0441	-.3522	-.4116	-.4796	.0293	.5812	-.4993	-.0891	-.1179	-.1095	-.0590	
120.000			.4001	-.0725	-.3549	-.4225	-.4263	-.0022	.2390	-.1034	-.2576	-.0906	-.0566	-.1026	-.0963
135.000								-.0716		.1751	-.2498	-.1188			
150.000			.4119	-.0591	-.3657	-.4134	-.2230	-.0008	.0859	.2696	-.0364	-.4219	-.1436	-.2359	-.1416
165.000				-.0343	-.3440	-.4083	-.3152		.1106	.2791	.2229	-.1849	-.1023	-.1072	-.1163
180.000	1.1700	.8881	.4622	-.0207	-.3366	-.3965	-.4559		.1527	.2750	.3392	-.3926	-.1028	-.1478	-.1276
270.000	1.1160							.5422							

X/LT .7460 .8530 .9280

PHI

.000	-.0153	.0755	-.0090
30.000	-.0071	.0951	.0005
60.000	.0017	.1124	.0407
90.000	.0433	.1216	
120.000	.0605	.1485	.2268
135.000	.0422	.1477	.1291
150.000	.0358	.1111	.0196
165.000	.0572	.1492	.2462
180.000	.0539	.1577	.2660

ALPHA(8) = 4.080 BETA(10) = 8.110

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1360	1.0160	.6374	.1524	-.2007	-.2770	-.3610	-.3166	.1159	.0636	-.0816	-.1590	-.1709	-.0933	-.0459
30.000			.5122	.0363	-.2856	-.3636	-.4247	-.3699	.2110	.1362	-.1326	-.1893	-.1361	-.0508	-.0148
60.000			.4201	-.0445	-.3589	-.4175	-.4116	-.0420	.3601	-.0181	-.2438	-.1141	-.1042	-.0519	-.0266
90.000		.7812	.3726	-.0819	-.3803	-.4366	-.2901	-.0155	.5687	-.4031	-.0672	-.1125	-.1117	-.0554	
120.000			.3580	-.0932	-.3887	-.4448	-.3136	-.0641	.2103	-.0588	-.2199	-.1374	-.0985	-.1368	-.1109
135.000								-.0893		.1744	-.2767	-.1551			
150.000			.3834	-.0824	-.3813	-.4338	-.1449	-.0659	.0488	.2338	-.0450	-.4751	-.1768	-.2533	-.1654
165.000				-.0623	-.3560	-.4247	-.1717	-.0628	.0967	.2319	.2076	-.2253	-.1431	-.1807	-.1344
180.000	1.1360	.7863	.4524	-.0296	-.3454	-.4069	-.4762	-.0437	.1236	.2334	.3000	-.4069	-.1617	-.2303	-.1708
270.000	1.1540							.5380							

X/LT .7460 .8530 .9280

PHI

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R01132)

ARC11-716 IA14 01-112+512N25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 4.080 BETA( 10 ) = 8.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.000	-.0191	.0350	-.0347
30.000	.0017	.0762	-.0203
60.000	-.0019	.1079	.0327
90.000	.0353	.1259	
120.000	.0481	.1431	.2576
150.000	.0327	.1485	.1436
180.000	.0219	.1092	.0110
210.000	.0296	.1307	.2576
240.000	.0203	.1341	.2559

ALPHA( 8 ) = 4.090 BETA( 11 ) = 10.160

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1050	.9763	.6159	.1377	-.2134	-.2883	-.3740	-.3117	.0372	-.0043	-.1266	-.1555	-.1813	-.1456	-.0595
30.000			.4674	.0005	-.3230	-.3903	-.4634	-.2690	.1476	.1180	-.1406	-.1943	-.1487	-.0806	-.0012
60.000			.3709	-.0842	-.3890	-.4372	-.4596	-.1144	.1981	-.0110	-.2238	-.1338	-.1358	-.0819	-.0225
90.000		.7283	.3280	-.1225	-.4037	-.4570	-.3860	-.0343	.5903		-.4594	-.0809	-.1208	-.1129	-.0722
120.000			.3203	-.1284	-.4080	-.4596	-.1761	-.1075	.1499	-.0433	-.2533	-.1637	-.1197	-.1686	-.1233
150.000								-.0944		.1213		-.3092		-.1843	
180.000			.3494	-.1107	-.3992	-.4527	-.1378	-.0905	.0113	.1922	-.0720	-.4793	-.2202	-.2998	-.1908
210.000				-.0774	-.3781	-.4372	-.1365	-.0921	.0988	.1968	.1761	-.2637	-.1795	-.2292	-.1580
240.000	1.1050	.7408	.4434	-.0398	-.3497	-.4091	-.4887	-.0356	.0520	.1850	.2498	-.3641	-.1883	-.2728	-.2294
270.000		1.1910							.5420						

X/LT .7480 .8530 .9280

PMI

.000	-.0467	.0050	-.1152
30.000	-.0363	.0477	-.0640
60.000	-.0263	.1052	.0351
90.000	.0113	.1340	
120.000	.0357	.1425	.2841
150.000	.0216	.1428	.1500
180.000	.0066	.0942	-.0060
210.000	-.0037	.1178	.2807
240.000	-.0332	.0801	.2229



ARC11-716 1A14 01+112+S12N25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 9 ) = 5.980 BETA( 1 ) = -9.980

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0890	1.0140	.6616	.1847	-.1809	-.2531	-.3391	-.2734	.1138	.0108	-.0978	-.1201	-.1465	-.1252	-.0885	
30.000			.8036	.3205	-.0683	-.1483	-.2404	.0812	.1627	-.0311	-.1022	-.0676	-.0362	-.0383	-.0425	
60.000			.8617	.3723	-.0247	-.1031	-.1328	.3558	.3951	-.1480	-.1477	-.0808	.0498	.0662	.0416	
90.000	1.1660		.8078	.3233	-.0690	-.1476	-.2385	.3972	.5044	-.3180	-.3180	-.1690	.0163	-.0391	-.0497	
120.000			.6659	.1920	-.1102	-.2826	-.3403	.0762	.0567	-.2475	-.3708	-.2367	.2021	.2003	.1144	
135.000								-.0454		-.2136		-.1286		.1529		
150.000			.5342	-.0626	-.2796	-.3500	-.4325	-.0816	-.0846	.2216	.1017	-.1713	.0439	-.0155	.0017	
165.000			-.0222	-.3432	-.4106	-.4455	-.3742	.0180	.0180	.2961	.3176	.0284	-.0504	-.0726	-.0180	
180.000	1.0890	.8329	.3935	-.0652	-.3760	-.4312	-.4273	-.2525	.1229	.3271	.3545	-.3771	-.0126	-.1569	-.1027	
270.000		.7109							.5718							

X/LT .7460 .8330 .9280

PHI

.000	-.0116	-.0024	-.1001
30.000	.0463	.1089	-.0401
60.000	.1034	.2089	.0353
90.000	.0877	.0508	
120.000	.2506	.2713	.8441
135.000	.2647	.3924	.5848
150.000	.2217	.3857	.6398
165.000	.2222	.3701	.6611
180.000	.1690	.2946	.4531

ALPHA( 9 ) = 5.980 BETA( 2 ) = -7.980

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1290	1.0550	.6888	.2032	-.1618	-.2410	-.3252	-.2676	.1673	.0788	-.0694	-.1166	-.1277	-.0845	-.0337	
30.000			.7949	.3032	-.0843	-.1637	-.2545	-.1538	.2113	.0253	-.0981	-.0829	-.0348	-.0229	-.0083	
60.000			.8222	.3295	-.0629	-.1413	-.2303	.2793	.4061	-.1211	-.1362	-.0956	.0414	.0317	.0494	
90.000		1.1290	.7581	.2712	-.1140	-.1911	-.2634	.3789	.4927	-.3576	-.1938	.0622	.0405	.0099		
120.000			.6290	.1472	-.2120	-.2832	-.3710	.0326	.0397	-.1786	-.3552	-.2081	.1650	.1584	.0814	
135.000								-.0779		-.0844		-.2177		.1158		
150.000			.5220	.0430	-.2939	-.3585	-.4445	-.1474	.0432	.2671	.1182	-.2190	.0314	-.0288	-.0048	
165.000			-.0211	-.3447	-.4056	-.4391	-.3141	.0973	.3136	.3326	-.0131	-.0017	-.0747	-.0091		
180.000	1.1290	.8447	.4077	-.0598	-.3664	-.4251	-.4555	-.0984	.1319	.3274	.3697	-.4097	-.0399	-.0917	-.0523	
270.000		.7640							.6071							

X/LT .7460 .8330 .9280

PHI

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ARC11-716 IAI4 Q1+T12+S12N25+AT10 EXTERNAL TANK (R81132)

ALPHA( 9 ) = 5.960 BETA( 2 ) = -7.980

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI	
.000	-.0035 .0366 -.0278
30.000	.0401 .1266 .0543
60.000	.0896 .2054 .0666
90.000	.1096 .1500
120.000	.1980 .2733 .7479
135.000	.2139 .3633 .5316
150.000	.1673 .3587 .5880
165.000	.1938 .3526 .6327
180.000	.1572 .2881 .4295

ALPHA( 9 ) = 5.940 BETA( 3 ) = -5.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI	
.000	1.1510 1.0860 .7573 .2170 -.1494 -.2309 -.3168 -.2619 .2222 .1382 -.0412 -.1079 -.0839 -.0365 .0079
30.000	.2824 -.1004 -.1806 -.2683 -.1824 .2524 .0799 -.1035 -.0666 -.0347 -.0028 .0291
60.000	.7759 .2824 -.1019 -.1755 -.2832 .1885 .4168 -.0933 -.1223 -.0607 .0240 .0503 .0466
90.000	1.0860 .7034 .2168 -.1555 -.2324 -.2691 .3402 .4920 .3917 .2121 .0135 -.0164 -.0198
120.000	.5887 .1085 -.2412 -.3107 -.3930 -.0117 .1199 -.2191 -.3725 -.2049 .1407 .1293 .0485
135.000	.5012 .0225 -.3072 -.3704 -.4426 -.0966 -.0708 .2222 .1382 -.0412 -.1079 -.0839 -.0365 .0079
150.000	-.0298 -.3484 -.4106 -.4159 .2115 .1195 .3082 .2706 .1205 .2428 .0317 -.0349 -.0255
165.000	.4164 .0466 .8130 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380
180.000	1.1510 .8466 .8130 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380
270.000	.7460 .8530 .9280

PMI	
.000	.0068 .0981 .0069
30.000	.0262 .1310 .0177
60.000	.0575 .1665 .0670
90.000	.0741 .1354
120.000	.1564 .2612 .6995
135.000	.1748 .3429 .4925
150.000	.1603 .3365 .5438
165.000	.1752 .3311 .5778
180.000	.1490 .2774 .3935

ARC11-716 1A14 OL+T12+S12+S5+T110 EXTERNAL TANK

(RB1732)

ALPHA( 9 ) = 5.980 BETA( 4 ) = -3.980

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1730	1.1070	.7195	.2220	-.1446	-.2214	-.3102	-.2628	.2335	.1822	-.0172	-.1129	-.0533	.0043	.0317
30.000			.7560	.2560	-.1237	-.1995	-.2876	-.2130	.2840	.1157	-.1048	-.0712	-.0373	.0256	.0389
60.000			.7320	.2353	-.1402	-.2107	-.3157	-.1225	.4314	-.0737	-.1312	-.0585	.0146	.0425	.0389
90.000		1.0480	.6555	.1896	-.1975	-.2898	-.3067	.2676	.5041	-.4151	-.2137	-.0085	-.0352	-.0288	
120.000			.5584	.0755	-.2933	-.3372	-.4158	-.0124	.1727	-.2267	-.3972	-.2359	.1099	.1001	.0133
135.000								-.0498		-.0448		-.2873		.0724	
150.000			.4899	.0080	-.3189	-.3827	-.3932	-.1532	.1018	.2598	.0988	-.2401	.0235	-.0344	-.0543
165.000			-.0298	-.3433	-.4039	-.3832	-.0535	.1029	.2808	.2869	.1095	.0069	-.0211	-.0308	
180.000	1.1730	.8324	.4250	-.0507	-.3509	-.4120	-.1604	-.0906	.0593	.2606	.3251	-.1763	-.0388	-.0475	-.0584
270.000		.8692							.5747						

X/LT .7460 .8330 .9280

PHI

.000	.0040	.0792	.0309
30.000	.0209	.1167	.0337
60.000	.0368	.1690	.0689
90.000	.0376	.1286	
120.000	.1295	.2483	.6184
135.000	.1447	.3162	.4393
150.000	.1375	.3144	.4709
165.000	.1361	.3144	.5125
180.000	.1329	.2727	.3691

ALPHA( 9 ) = 5.970 BETA( 5 ) = -1.970

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	1.1200	.7270	.2269	-.1454	-.2172	-.3064	-.2634	.2501	.2004	-.0035	-.1112	-.0243	.0189	.0424
30.000			.7313	.2307	-.1444	-.2162	-.3046	-.2567	.2838	.1491	-.1021	-.0715	-.0211	.0264	.0404
60.000			.6862	.1897	-.1759	-.2436	-.3315	.0837	.4377	-.0455	-.1361	-.0261	.0048	.0300	.0273
90.000		1.0080	.5074	.1167	-.2337	-.3046	-.3691	.2182	.5116	-.4383	-.1771	-.0204	-.0532	-.0305	
120.000			.2233	.2367	-.2946	-.3608	-.4415	-.0157	.1992	-.2579	-.4090	-.1678	.0903	.0593	-.0176
135.000								-.0281		-.0338		-.2768		.0334	
150.000			.4731	-.0096	-.3249	-.3875	-.3925	-.0793	.1140	.2589	.0704	.2225	.0122	-.0578	-.0691
165.000			-.0303	-.3483	-.4012	-.2660	-.0407		.0567	.2781	.2694	-.1353	-.0019	-.0295	-.0327
180.000	1.1860	.8323	.4285	-.0521	-.3528	-.4080	-.1809	-.0566	.0639	.2802	.3217	-.1449	-.0304	-.0284	-.0347
270.000		.9143							.5526						

X/LT .7460 .8330 .9280

PHI

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ARC11-715 1A14 01+T112+S12K25+AT10 EXTERNAL TANK

(RB1732)

ALPHAO ( 9 ) = 5.970 BETA0 ( 5 ) = -1.970

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT .7480 .8330 .9280

PMI

.000 .0117 .0657 .0481  
 30.000 .0143 .1117 .0371  
 60.000 .0181 .1482 .0687  
 90.000 .0512 .1171  
 120.000 .1130 .2363 .4935  
 135.000 .1174 .2845 .3601  
 150.000 .1014 .2778 .3728  
 165.000 .1243 .2798 .4531  
 180.000 .1137 .2397 .3354

ALPHAO ( 9 ) = 5.980 BETA0 ( 6 ) = .030

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PMI

.000 1.1910 1.1220 .7280 .2289 -.1387 -.2153 -.3055 -.2609 .2633 .2084 .0024 -.1066 -.0045 .0319 .0496  
 30.000 .7014 .2031 -.1561 -.2391 -.3230 -.2776 .2843 .1730 -.1037 -.0753 -.0092 .0255 .0411  
 60.000 .6350 .1410 -.2127 -.2789 -.3795 .0819 .4102 -.0117 -.1473 .0039 .0034 .0188 .0180  
 90.000 .9616 .5590 .0682 -.2685 .3352 .4209 .1047 .5246 -.4545 -.1193 -.0535 -.0867 -.0328  
 120.000 .4880 .0058 -.3146 .3750 .4548 .0097 .2283 -.2840 .3998 .1408 .0575 .0206 -.0292  
 135.000 .4530 .0235 -.3392 .3963 .4106 .0353 .1126 .2323 .0462 .2300 .0294 .0818 .0488  
 150.000 .0365 .3465 .4026 .1722 .0415 .0516 .2738 .2456 .1411 .0115 .0315 .0333  
 165.000 1.1910 .8524 .4326 -.0520 .3463 .4059 .1249 .0479 .0693 .2663 .3145 .1336 .0174 .0225 .0235  
 180.000 .9659

K/LT .7480 .8330 .9280

PMI

.000 .0155 .0552 .0498  
 30.000 .0129 .0799 .0305  
 60.000 .0098 .1146 .0472  
 90.000 .0470 .0723  
 120.000 .1129 .2082 .3427  
 135.000 .1008 .2293 .2375  
 150.000 .0909 .2167 .2285  
 165.000 .1208 .2365 .2889  
 180.000 .1299 .2347 .2485



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4631

ARC11-716 IAI4 OA+T12+S12N25+AT110 EXTERNAL TANK

(R81732)

ALPHA( 9 ) = 5.970 BETA( 7 ) = 2.030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0180	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1830	1.1160	.7226	.2235	-.1423	-.2234	-.3092	-.2596	.3150	.1945	-.0063	-.1072	-.0282	.0235	.0433
30.000			.6636	.1693	-.1911	-.2668	-.3476	-.2694	.3166	.1786	-.1082	-.1101	-.0283	.0222	.0333
60.000			.5907	.0903	-.2615	-.3191	-.4092	-.3459	.4233	.0071	-.1754	-.0185	-.0099	.0099	.0089
90.000		.9030	.5016	.0218	-.3059	-.3717	-.4216	.1306	.5239		-.4460	-.0311	-.0467	-.0618	-.0339
120.000			.4443	-.0227	-.3394	-.4001	-.4720	-.0271	.2693	-.2445	-.3638	-.1080	.0068	-.0170	-.0465
135.000								-.1165		.0742		-.2334		-.0328	
150.000			.4241	-.0545	-.3557	-.4103	-.4776	-.0733	.1402	.2789	.0039	-.2728	-.0632	-.1025	-.0909
165.000				-.0567	-.3524	-.4136	-.4944	-.0599	.2051	.2919	.2432	-.1847	-.0347	-.0437	-.0383
180.000	1.1830	.8487	.4269	-.0566	-.3559	-.4108	-.4671	-.0499	.1172	.2832	.3123	-.1590	-.0350	-.0293	-.0450
270.000	1.0110														
K/LT	.7460	.6530	.9280												

TMI

.000	.0081	.0848	.0439												
30.000	.0030	.1100	.0295												
60.000	-.0017	.1200	.0323												
90.000	.0452	.0779													
120.000	.1070	.1869	.2674												
135.000	.0942	.1992	.1649												
150.000	.0956	.1795	.1238												
165.000	.1082	.2186	.2785												
180.000	.1164	.2348	.2194												

ALPHA( 9 ) = 5.990 BETA( 8 ) = 4.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1730	1.1000	.7120	.2175	-.1513	-.2289	-.3122	-.2597	.2716	.1747	-.0198	-.1128	-.0685	-.0051	.0340
30.000			.6264	.1361	-.2140	-.2881	-.3666	-.2926	.3324	.1745	-.1104	-.1345	-.0647	-.0005	.0233
60.000			.5305	.0466	-.2854	-.3489	-.4371	-.3939	.3958	.0219	-.1822	-.0453	-.0429	-.0016	.0064
90.000		.8643	.4533	-.0139	-.3324	-.3951	-.3910	.0369	.5355		-.3848	.0169	-.0388	-.0694	-.0292
120.000			.4099	-.0511	-.3551	-.4133	-.4817	-.0251	.2475	-.1906	-.2921	-.0341	-.0315	-.0477	-.0612
135.000								-.0599		.1287		-.2176		-.0552	
150.000			.4069	-.0719	-.3594	-.4192	-.4824	-.0961	.1149	.2830	-.0131	-.3208	-.0872	-.1299	-.1205
165.000				-.0571	-.3577	-.4182	-.4824	-.0616	.0978	.2909	.2273	-.2829	-.0543	-.0495	-.0340
180.000	1.1730	.8536	.4270	-.0475	-.3553	-.4133	-.4846	-.0480	.1221	.2784	.3295	-.1566	-.0533	-.0475	-.0635
270.000	1.0600														
K/LT	.7460	.6530	.9280												

TMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+12+512+25+AT10 EXTERNAL TANK (RB1732)

ALPHA( 9 ) = 5.930 BETA( 8 ) = 4.080

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7400 .0530 .9200

PMI  
 .000 .0000 .0040 .0365  
 30.000 -.0028 .1056 .0222  
 60.000 -.0005 .1212 .0237  
 90.000 .0009 .1125  
 120.000 .0963 .1728 .2184  
 135.000 .0807 .1749 .1267  
 150.000 .0696 .1353 .0653  
 165.000 .0936 .1468 .2305  
 180.000 .0992 .2025 .2434

ALPHA( 9 ) = 5.940 BETA( 9 ) = 6.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2970 .3440 .3940 .4510 .5090 .5580 .6380  
 PMI  
 .000 1.1500 1.0850 .7023 .2146 .1526 .2315 .3171 .2698 .1554 .1344 .0397 .1137 .1015 .0459 .0032  
 30.000 .5690 .1057 .2395 .3127 .3889 .3221 .3029 .1615 .1126 .1519 .0997 .0410 .0030  
 60.000 .4819 .0073 .3164 .3792 .3584 .0304 .3765 .0469 .1749 .0712 .0713 .0138 .0033  
 90.000 .8193 .4030 .0489 .3599 .4163 .3218 .0345 .5009 .2808 .0321 .0348 .0564 .0366  
 120.000 .3730 .0774 .3779 .4280 .4717 .0136 .2048 .1475 .2296 .1010 .0684 .0808 .0703  
 135.000 .3809 .0936 .3810 .4288 .4505 .0947 .0901 .2649 .0410 .3734 .1137 .1903 .1225  
 150.000 .165.000 .0725 .3693 .4273 .2723 .0709 .0876 .2730 .2163 .2001 .0819 .0762 .0870  
 160.000 1.1500 .8345 .4151 .0806 .3629 .4173 .4833 .0512 .1162 .2585 .3055 .1310 .0862 .1009  
 270.000 1.0930

K/LT .7400 .0530 .9200

PMI  
 .000 .0102 .0895 .0062  
 30.000 .0033 .0459 .0121  
 60.000 .0197 .1193 .0380  
 90.000 .0598 .1256  
 120.000 .0769 .1339 .2093  
 135.000 .0614 .1534 .1293  
 150.000 .0900 .1174 .0247  
 165.000 .0730 .1560 .2550  
 180.000 .0730 .1678 .2696

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4833

ARC11-716 1A14 04+112+512+25+AT10 EXTERNAL TANK

(RB1732)

ALMAD (9) = 5.920 BETAD (10) = 8.130

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	Y	0.000	0.006	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630		
m/s																
1.000		1.1200	1.0590	.6884	.2015	-.1621	-.2403	-.3303	-.2827	.0978	.0753	-.0668	-.1219	-.1356	-.0870	-.0371
30.000			.5446	.0666	-.2653	-.3413	-.4166	-.3473	-.3473	.2277	.1516	-.1130	-.1642	-.1383	-.0927	-.0340
60.000			.4291	-.0733	-.3523	-.4296	-.3913	-.3375	-.3375	.3355	.0653	-.1645	-.1029	-.1059	-.0339	-.0101
90.000			.7627	.3637	-.0306	-.3995	-.4253	-.2638	-.0649	.4551		-.2286	-.0006	-.0377	-.0643	-.0563
120.000			.3383	.1107	-.3955	-.4503	-.4539	-.3243	-.0243	.1671	-.0930	-.1795	-.1271	-.0948	-.1076	-.0989
150.000										-.1302	-.1600		-.2427		-.1290	
180.000			.3496	-.1115	-.3985	-.4444	-.2116	-.0913	.0645	.2349	-.0542	-.4206	-.1496	-.2106	-.1361	
210.000				-.0300	-.3863	-.4344	-.1918	-.0030	.0540	.2305	.1905	-.2181	-.1168	-.1399	-.1209	
240.000			.4098	-.0704	-.3720	-.4329	-.4941	-.0633	.0887	.2157	.2675	-.3798	-.1179	-.1897	-.1372	
270.000										.5102						

X/LT 0.7400 0.8330 0.9200

W/L	0.000	0.006	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	30.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	60.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	90.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	120.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	150.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	180.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	210.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	240.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	270.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630

ALMAD (9) = 5.900 BETAD (11) = 10.150

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	0.000	0.060	0.490	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630		
W/L	1.0800	1.0170	0.6526	0.1851	-0.1753	-0.2502	-0.3390	-0.2744	0.0182	0.039	-0.0954	-0.1308	-0.1667	-0.1378	-0.1067
W/L	30.000	0.000	0.4975	0.0900	-0.2987	-0.3695	-0.4329	-0.3266	0.1542	0.1356	-0.1045	-0.1861	-0.1828	-0.1265	-0.0320
W/L	60.000	0.000	0.3757	0.0617	-0.3862	-0.4515	-0.5352	-0.3978	0.1607	0.111	-0.0952	-0.1750	-0.1671	-0.0732	0.0067
W/L	90.000	0.000	0.3101	-0.1267	-0.4159	-0.4674	-0.5999	-0.4051	0.5350	-0.4160	-0.0832	-0.0962	-0.0962	-0.018	-0.0714
W/L	120.000	0.000	0.3002	-0.1408	-0.4172	-0.4694	-0.5115	-0.6095	0.1910	-0.0933	-0.2816	-0.1241	-0.1094	-0.1410	-0.0921
W/L	150.000	0.000	0.3195	-0.1357	-0.4139	-0.4536	-0.5831	-0.4112	0.1118	0.007	-0.0675	-0.4495	-0.1903	-0.2480	-0.1545
W/L	180.000	0.000	-0.1063	-0.4012	-0.4578	-0.5243	-0.6045	-0.2929	0.1923	0.1552	-0.2837	-0.1653	-0.1653	-0.1038	-0.1176
W/L	210.000	0.000	0.3975	-0.0612	-0.3806	-0.4385	-0.5000	-0.0001	0.0443	0.1537	0.092	-0.3558	-0.1629	-0.2365	-0.1828
W/L	240.000	0.000	1.1730						0.1135						

X/LT 0.7400 0.8330 0.9200

W/L	0.000	0.006	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	30.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	60.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	90.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	120.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	150.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	180.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	210.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	240.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630
W/L	270.000	0.000	0.040	0.110	0.170	0.190	0.210	0.240	0.290	0.340	0.410	0.500	0.630

ARC11-716 1A14 2A+712-5:12-25-4710 EXTERNAL TANK (R51732)

ALPHA( 9 ) = 5.000 BETA( 11 ) = 10.150

## SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

W/L	.7400	.8550	.9200
PM			
.000	-.0187	.0004	-.0751
50.000	-.0249	.0350	-.0282
60.000	-.0072	.1108	.0612
90.000	.0136	.1470	
120.000	.0550	.1568	.2430
135.000	.0440	.1535	.1403
150.000	.0371	.1116	-.0023
165.000	.0304	.1254	.2574
180.000	-.0035	.1041	.1250

ALPHA( 10 ) = 6.000 BETA( 11 ) = -9.950

## SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CF

W/L	.0000	.0000	.0490	.1100	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580
PM														
.000	1.0640	1.0510	.7103	.2373	-.1303	-.0333	-.2898	-.2301	.0430	.0202	-.0734	-.0858	-.1150	-.1102
50.000			.5535	.3703	-.0706	-.0972	-.1924	.1007	.1991	.0046	-.0679	-.0127	-.0074	-.0067
60.000			.7850	.3091	.0039	-.0701	-.1559	.3039	.4337	-.0379	-.0975	-.0578	.0566	.0743
90.000		1.1410	.7919	.2140	-.0674	-.1453	.1315	.4067	.4544		-.3013	-.1680	.0045	.0727
120.000			.6201	.1512	-.0202	-.0720	-.3049	.0339	-.0359	-.1864	-.3214	-.1901	.0948	.1564
135.000							-.0568			-.1846		-.1904		.1531
150.000			.4781	.0110	-.3085	-.3741	-.4288	-.1457	-.1656	.1762	.0313	-.1712	.0092	-.0008
165.000				-.0565	-.1561	-.4293	-.4570	-.2821	-.0411	.2778	.2793	.0229	-.0742	-.0613
180.000	1.0640	.7770	.3436	-.0979	-.3075	-.4445	-.4524	-.2590	.1021	.3287	.3571	-.3822	-.0364	-.1035
210.000		.5435												-.0343

W/L .7400 .8550 .9200

PM			
.000	.0419	.0002	-.0578
50.000	.0756	.1272	.0102
60.000	.1369	.2360	.0966
90.000	.1599	.2226	
120.000	.2392	.2812	.6851
135.000	.2006	.3061	.5363
150.000	.2244	.3566	.6041
165.000	.2213	.3510	.5624
180.000	.1740	.2914	.4479



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14 - VOL. 9

(RB1732)

ARC11-716 IAI14 01+T12+S12N5+AT10 EXTERNAL TANK

ALPHA(10) = 0.110 BETA( 2) = -7.950

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0970	1.0890	.7358	.2560	-.1224	-.1973	-.2860	-.2280	.1668	.0976	-.0387	-.0691	-.0876	-.0758	-.0577	
30.000			.8404	.3532	-.0407	-.1211	-.2133	-.1299	.2469	.0641	-.0603	-.0203	-.0026	.0000	.0052	
60.000			.8404	.3555	-.0382	-.1151	-.2262	.3041	.4431	-.0692	-.0895	-.0460	.0492	.0619	.0340	
90.000		1.1010	.7396	.2671	-.1186	-.1970	-.2265	.3826	.4507		-.3299	-.1773	.0151	.0741	.0616	
120.000			.5843	.1108	-.2393	-.3107	-.3809	.0258	-.0318	-.1760	-.3284	-.2096	.0769	.1411	.1043	
135.000								-.1072		-.0100		-.2523		.1218		
150.000			.4709	-.0042	-.3272	-.3914	-.4551	-.2629	-.0654	.2408	.0542	-.2220	.0026	-.0025	.0204	
165.000				-.0627	-.3754	-.4334	-.4400	-.3149	.0618	.3032	.2954	-.0226	.0003	-.0380	.0199	
180.000	1.0970	.7865	.3598	-.0924	-.3906	-.4459	-.4533	-.1436	.1144	.3200	.3578	-.4072	-.0324	-.0656	-.0114	
				</												

PHI															
.000	.0026	.0562	-.0067												
30.000	.0626	.1536	.0373												
60.000	.1104	.2301	.0593												
90.000	.1462	.2156													
120.000	.2044	.2837	.6683												
135.000	.2270	.3969	.5102												
150.000	.1972	.3549	.5752												
165.000	.2059	.3435	.6102												
180.000	.1671	.2865	.4176												

ALPHA(10) = 0.130 BETA( 3) = -5.940

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP													
X/LT		.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1200	1.1230	.7571	.2699	-.1100	-.1857	-.2770	-.2227	.2313	.1549	-.0101	-.0660	-.0751	-.0504	.0039
30.000			.8212	.3294	-.0610	-.1401	-.2327	-.1490	.2887	.1107	-.0593	-.0255	-.0119	-.0042	.0297
60.000			.7931	.3046	-.0807	-.1549	-.2690	.2398	.4495	-.0418	-.0878	-.0286	.0319	.0480	.0465
90.000		1.0530	.6851	.2107	-.1651	-.2397	-.2719	.3749	.4439		-.3591	-.1744	.0209	.0583	.0529
120.000			.5424	.0706	-.2710	-.3408	-.4196	.0155	.0232	-.1454	-.3422	-.2268	.0743	.1234	.0699
135.000								-.1477		.0090		-.2743		.0948	
150.000			.4445	-.0250	-.3441	-.4034	-.4150	-.2842	.0513	.2453	.0627	-.2629	.0079	-.0156	-.0036
165.000				-.0642	-.3791	-.4342	-.4193	-.1987	.0988	.2995	.2753	-.0565	.0319	-.0218	.0127
180.000	1.1200	.7860	.3638	-.0975	-.3851	-.4437	-.1589	-.0965	.0691	.2949	.3302	-.3785	-.0437	-.0588	-.0121
270.000		.7857							.4892						

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81732)

ARC11-716 IA14 01+T12+S12N23+AT10 EXTERNAL TANK

ALPHA0(10) = 8.130 BETA0 ( 3) = -5.940

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
.000 .0263 .0874 .0289  
30.000 .0554 .1481 .0496  
60.000 .0776 .2004 .0832  
90.000 .1230 .1822 .1634  
120.000 .1695 .2792 .6334  
135.000 .1363 .3464 .4658  
150.000 .1719 .3323 .5135  
165.000 .1860 .3339 .5575  
180.000 .1658 .2899 .3903

ALPHA0(10) = 7.980 BETA0 ( 4) = -3.970

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI  
.000 1.1460 1.1460 .7725 .2784 -.0990 -.1795 -.2699 -.2263 .2907 .2021 .0151 -.0499 -.0405 -.0249 .0432  
30.000 .8011 .5045 -.0800 -.1608 -.2497 -.1852 .3032 .1491 -.0757 -.0094 -.0038 .0103 .0549  
60.000 .7505 .2592 -.1167 -.1900 -.3004 .1527 .4524 -.0200 .0154 .0258 .0400 .0447  
90.000 .6413 .1637 -.1981 -.2727 -.3379 .3128 .4532 .4532 .0111 .0008 .0111 .0144  
120.000 .5174 .0414 -.2917 -.3571 -.4326 -.0423 .0857 -.1526 .0761 .1059 .0521  
135.000 .4415 -.0315 -.3454 -.4070 -.3946 -.1943 .0875 .2566 .0457 -.2603 .0049 -.0158 -.0218  
150.000 .0803 -.3689 -.4270 -.3499 -.0737 .0905 .2675 .2492 .1130 -.0002 .0052 .0031  
165.000 1.1460 .7996 .3762 -.0865 -.3761 -.4273 -.1250 -.0765 .0417 .2650 .3251 -.1725 -.0528 -.0184 -.0174  
180.000 .8401

X/LT .7460 .8530 .9280

PHI  
.000 .0261 .1010 .0501  
30.000 .0457 .1409 .0476  
60.000 .0372 .1820 .0724  
90.000 .0898 .1342  
120.000 .1310 .2755 .6018  
135.000 .1676 .3317 .4319  
150.000 .1529 .3271 .4666  
165.000 .1720 .3220 .5131  
180.000 .1524 .2824 .3759



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12+S12M25+AT10 EXTERNAL TANK (RB1732)

ALPHA(10) = 8.010 BETA( 5) = -1.970

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1540	1.1570	.7753	.2817	-.1003	-.1811	-.2699	-.2267	.2744	.2189	.0253	-.0518	.0006	.0253	.0511
30.000			.7710	.2754	-.1064	-.1864	-.2749	-.2257	.3202	.1726	-.0690	-.0202	.0098	.0340	.0909
60.000			.6994	.2073	-.1615	-.2342	-.3408	-.0876	.4587	.0047	-.0906	.0317	.0289	.0340	.0290
90.000		.9759	.5877	.1053	-.2453	-.3135	-.3872	.2593	.4638		-.3705	-.0839	-.0089	-.0273	-.0101
120.000			.4803	.0058	-.3225	-.3842	-.4428	-.0427	.1195	-.1400	-.4150	-.1792	.0688	.0659	.0124
135.000								-.1316		.0429		-.2699		.0356	
150.000				.4229	-.0444	-.3609	-.4171	-.4020	.0904	.2489	.0332	-.2401	.0011	-.0427	-.0420
165.000				-.0697	-.3777	-.4296	-.1337	-.0804	.0431	.2603	.2453	-.1376	-.0025	-.0119	-.0017
180.000	1.1540	.7959	.3770	-.0865	-.3812	-.4303	-.1098	-.0809	.0462	.2580	.3219	-.1648	-.0302	-.0114	-.0090
270.000		.8665							.5009						
X/LT	.7460	.8530	.9280												

ALPHA(10) = 7.930 BETA( 6) = .060

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	1.1580	.7743	.2791	-.1024	-.1818	-.2746	-.2268	.2698	.2227	.0316	-.0512	.0159	.0299	.0543
30.000			.7384	.2444	-.1335	-.2114	-.2992	-.2539	.2997	.1932	-.0652	-.0340	.0082	.0304	.0497
60.000			.6463	.1577	-.2050	-.2711	-.3710	-.0439	.4627	.0246	-.1002	.0154	.0250	.0334	.0287
90.000		.9326	.5378	.0613	-.2854	-.3499	-.4040	.1259	.4861		-.3608	-.0365	.0025	-.0339	-.0118
120.000			.4501	-.0188	-.3454	-.4056	-.4749	-.0442	.1321	-.1394	-.4172	-.1527	.0385	.0336	.0010
135.000								-.0353		.0524		-.2589		.0132	
150.000				.4119	-.0572	-.3670	-.4237	-.3725	.0717	.2487	.0214	-.2409	-.0361	-.0698	-.0601
165.000				-.0798	-.3790	-.4275	-.1388	-.0765	.0312	.2600	.2481	-.1453	-.0129	-.0177	-.0044
180.000	1.1640	.8003	.3833	-.0846	-.3775	-.4290	-.1817	-.0903	.0442	.2638	.3097	-.1430	-.0287	-.0071	.0014
270.000		.9402							.4792						
X/LT	.7460	.8530	.9280												

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TABULATED PRESSURE DATA - IAI14A - VOL. 9

DATE 06 JAN 75

(RB1732)

ARC11-716 IAI14 OL+T12+S12N23+AT10 EXTERNAL TANK

ALPHA(10) = 7.930 BETA( 6) = .060

SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI  
.000 .0383 .0641 .0680  
30.000 .0348 .0894 .0389  
60.000 .0271 .1140 .0325  
90.000 .0618 .0835  
120.000 .1244 .2151 .3334  
135.000 .1108 .2363 .2341  
150.000 .0979 .2225 .2244  
165.000 .1327 .2441 .3014  
180.000 .1380 .2436 .2584

ALPHA(10) = 7.970 BETA( 7) = 2.050

SECTION ( 1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5980 .6380

PHI  
.000 1.1580 1.1520 .7700 .2757 -.1091 -.1860 -.2756 -.2278 .3300 .2132 .0237 -.0620 -.0088 .0175 .0459  
30.000 .6983 .2070 -.1568 -.2369 -.3213 -.2730 .3633 .1932 -.0724 -.0846 -.0193 .0121 .0352  
60.000 .5894 .1057 -.2430 -.3096 -.3879 -.1875 .4779 .0530 -.1112 -.0279 .0083 .0320 .0304  
90.000 .8822 .0154 -.3190 -.3797 -.3936 .0286 .5205 .5205 .3535 .0307 .0213 -.0137 -.0091  
120.000 .4122 -.0509 -.3642 -.4189 -.4468 -.0383 .1481 -.1065 -.4046 -.1152 .0160 .0032 -.0159  
135.000 .3865 -.0745 -.3794 -.4312 -.1671 -.0974 .0839 .2529 .0126 -.2529 -.0999 -.0868 -.0893  
150.000 .3802 -.3802 -.4312 -.1093 -.0795 .0588 .2655 .2412 .2412 .1735 .0316 .0303 .0115  
165.000 .3824 -.0869 -.3837 -.4317 -.2271 -.0795 .0596 .2632 .3079 .1319 .0326 -.0157 .0159  
180.000 1.1580 .7956 .3824  
270.000 .9868

X/LT .7460 .8530 .9280

PHI  
.000 .0276 .1080 .0606  
30.000 .0187 .1187 .0499  
60.000 .0180 .1803 .0438  
90.000 .0637 .1093  
120.000 .1137 .1892 .2497  
135.000 .1030 .2009 .1560  
150.000 .0981 .1772 .1294  
165.000 .1159 .2242 .2857  
180.000 .1244 .2411 .2319

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12-S12M23+AT10 EXTERNAL TANK (R81732)

ALPHA(10) = 7.920 BETA( 9) = 4.082

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
741															
.000	1.1470	1.1370	.7590	.2668	-.1130	-.1879	-.2775	-.2301	.2752	.1951	.0126	-.0610	-.0440	-.0276	.0397
30.000			.6991	.1753	-.1172	-.2593	-.3447	-.2954	.3514	.1959	-.0741	-.1117	-.0819	-.0424	.0206
60.000			.5406	.0628	-.2782	-.3435	-.3890	-.2475	.4732	.0784	-.1119	-.1089	-.0442	.0169	.0359
90.000		.8360		-.0236	-.3469	-.4103	-.3951	-.0086	.5361		-.3837	-.2245	.0232	.0077	-.0129
120.000			.3820	-.0761	-.3799	-.4354	-.4251	-.0451	.1650	-.0551	-.3651	-.1497	.0078	-.0035	-.0290
150.000								-.0932		.1302		-.2822		-.0145	
180.000			.3690	-.0928	-.3879	-.4412	-.2326	-.1048	.0916	.2659	.0158	-.3056	-.0786	-.0755	-.0887
210.000				-.0950	-.3886	-.4399	-.1225	-.0852	.0620	.2722	.2199	-.1986	-.0519	-.0234	-.0114
240.000	1.1470	.7960	.3778	-.0940	-.3834	-.4399	-.2921	-.0853	.0696	.2575	.2979	-.1361	-.0504	-.0229	-.0223
270.000		1.0330							.4649						

X/LT .7480 .8530 .9280

741

.000	.0268	.0970	.3507												
30.000	.0067	.1160	.0561												
60.000	.0265	.1559	.1122												
90.000	.0694	.1671													
120.000	.1127	.1732	.2167												
150.000	.1049	.1819	.1292												
180.000	.0896	.1480	.0705												
210.000	.1117	.2027	.2304												
240.000	.1163	.2113	.2434												

ALPHA(10) = 7.920 BETA( 9) = 6.110

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
741															
.000	1.1830	1.1820	.7525	.2643	-.1072	-.1929	-.2820	-.2332	.2528	.1536	-.0094	-.0743	-.0828	-.0533	.0088
30.000			.6217	.1413	-.2131	-.2893	-.3681	-.3132	.3309	.1774	-.0827	-.1282	-.1393	-.0849	-.0128
60.000			.4883	.0145	-.3123	-.3764	-.4053	-.1165	.4340	.0861	-.1229	-.1272	-.0752	-.0148	.0198
90.000		.7843		-.0823	-.3746	-.4340	-.4483	-.0019	.4977		-.4076	-.2589	.0110	-.0233	-.0428
120.000			.3452	-.1030	-.3931	-.4493	-.4359	-.0312	.1851	-.0311	-.3507	-.1444	.0164	-.0384	-.0482
150.000								-.1040		.1999		-.3048		-.0533	
180.000			.3444	-.1126	-.3991	-.4505	-.1617	.0652	.0652	.2770	.0032	-.3516	-.1113	-.1439	-.0806
210.000				-.1125	-.3936	-.4515	-.1286	-.0911	.0704	.2713	.2084	-.2195	-.0847	-.0453	-.0569
240.000	1.1830	.7772	.3559	-.1052	-.3391	-.4493	-.2383	-.0515	.1105	.2353	.2715	-.2458	-.0837	-.0591	-.0643
270.000		1.0710							.4622						

X/LT .7480 .8530 .9280

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81132)

ARC11-71.6 IA14 OL+T12+912N25+AT10 EXTERNAL TANK

ALPHA(10) = 7.920 BETA( 9) = 6.110

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.000 .0039 .1017 .0410  
30.000 -.0089 .0887 .0428  
60.000 .0219 .1442 .1248  
90.000 .0631 .1755  
120.000 .0978 .1778 .2227  
150.000 .0828 .1781 .1383  
180.000 .0681 .1450 .0583  
195.000 .0905 .1767 .2635  
210.000 .0834 .1843 .2683

ALPHA(10) = 7.910 BETA( 10) = 8.160

SECTION (1) EXTERNAL TANK

X/LT .0630 .0880 .0480 .1130 .1730 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .5580 .6380

PMI

.000 1.0950 1.0580 .7510 .2530 .1334 .1410 .1460 .1460 .1460 .1460 .1460 .1460 .1460 .1460  
30.000 5710 .0247 .1320 .1387 .1387 .1387 .1387 .1387 .1387 .1387 .1387 .1387 .1387 .1387  
60.000 .4310 .1347 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410  
90.000 .3420 .1328 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410  
120.000 .1410 .1320 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410  
150.000 .3160 .1340 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410  
180.000 .1216 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410  
210.000 .1063 .1386 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410 .1410

X/LT .7480 .8530 .9280

PMI

.000 -.0106 .0362 .0058  
30.000 .0134 .0324 .0169  
60.000 .0496 .1281 .1003  
90.000 .0461 .1702 .2321  
120.000 .0633 .1728 .1452  
150.000 .0772 .1758 .1452  
180.000 .0633 .1385 .0441  
195.000 .0755 .1551 .2583  
210.000 .0501 .1467 .2446



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-71.6 1A14 01+T12+S12+S25+AT10 EXTERNAL TANK

(R81732)

ALPHA(10) = 8.060 BETA(11) = 17.180

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6350
PHI															
.000	1.0600	1.0320	.7095	.2399	-.1270	-.2086	-.3038	-.2058	-.0077	.0166	-.0690	-.1025	-.1230	-.1098	-.1116
30.000			.5255	.0622	-.2812	-.3523	-.4041	-.3476	.1551	.1373	-.0856	-.1521	-.1771	-.1526	-.0782
60.000			.3800	-.0766	-.3843	-.4086	-.3702	-.1016	.1833	.0285	-.1612	-.1741	-.1485	-.0835	.0024
90.000		.6823	.3024	-.1326	-.4281	-.4660	-.3369	-.0441	.4551	-	-.4800	-.1414	-.1247	-.1032	-.0698
120.000			.2769	-.1551	-.4323	-.4763	-.2787	-.0908	.1792	-.0747	-.3162	-.1115	-.0876	-.1083	-.0574
135.000								-.1254		.1330		-.2852		-.1215	
150.000			.2867	-.1554	-.4336	-.4783	-.1944	-.1304	.0285	.1961	-.0800	-.4034	-.1661	-.1967	-.1230
165.000				-.1467	-.4248	-.4790	-.1539	-.1348	.0648	.1762	.1470	-.2591	-.1347	-.1496	-.1125
180.000	1.0600	.6357	.3489	-.1230	-.4073	-.4670	-.4539	-.0743	.0306	.1252	.1627	-.3379	-.1513	-.2215	-.1408
270.000		.11490						.4752							

X/LT .7460 .8330 .9280

PHI

.000	.0367	.0057	-.0900												
30.000	-.0108	.0215	-.0100												
60.000	.0172	.1174	.0775												
90.000	.0195	.1573													
120.000	.0763	.1657	.2258												
135.000	.0747	.1677	.1386												
150.000	.0556	.1352	.0203												
165.000	.0515	.1444	.2482												
180.000	.0172	.1035	.2225												

ALPHA(11) = 10.040 BETA(1) = -9.930

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	1.0350	1.0880	.7570	.2855	-.0976	-.1728	-.2647	-.1934	.0127	.0431	-.0418	-.0443	-.0732	-.0799	-.0914
30.000			.9057	.4190	.0151	-.0660	-.1619	.2550	.2396	.0385	-.0283	.0224	.0286	.0228	.0282
60.000			.9057	.4238	.0204	-.0570	-.1741	.3853	.4681	-.0586	-.0518	.0014	.0872	.0953	.0947
90.000	1.1130		.7756	.3030	-.0902	-.1641	-.1256	.3878	.4239	-	-.3354	-.1705	-.0015	.0760	.1091
120.000			.5706	.1082	-.2462	-.3165	-.3227	-.0154	-.1234	-.2116	-.3535	-.2061	.0473	.1344	.1167
135.000								-.1211		-.2313		-.1790		.1629	
150.000			.4223	-.0375	-.3583	-.4258	-.4558	-.1779	-.2456	.1136	-.0775	-.1918	.0331	-.0542	.0591
165.000				-.1166	-.4166	-.4756	-.4614	-.3629	-.0862	.2367	.1940	.0272	-.0365	-.0217	.0596
180.000	1.0350	.7247	.2964	-.1437	-.4395	-.4771	-.4627	-.2858	.0815	.2989	.3236	-.3901	-.0342	-.0634	.0026
270.000		.6546						.3106							

X/LT .7460 .8330 .9280

PHI

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ARC11-716 1A14 01+I12+S12N25+AT10 EXTERNAL TANK

ALPHA(11) = 15.040 BETA( 1 ) = -9.930

SECTION (1) EXTERNAL TANK

X/LT	RHI	.7460	.8530	.9280
	.000	.0483	.0224	-.0356
30.000	.0834	.1583	.1583	.0507
60.000	.1445	.2541	.2541	.1378
90.000	.2024	.2770		
120.000	.2183	.2574	.5922	
135.000	.2645	.3877	.5254	
150.000	.2164	.3558	.5885	
165.000	.2098	.3316	.6545	
180.000	.1707	.2688	.4363	

ALPHA0(11) = 9.930 BETA0(2) = -7.950

SECTION (1) EXTERNAL TASK

DEPENDENT VARIABLE C2

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0720	1.1250	.7932	.3001	-.0891	-.1628	-.2524	-.1862	.1662	.1165	-.0050	-.0244	-.0901	-.0576	-.0560
30.000			.8911	.0942	-.0082	-.0880	-.1814	-.0765	.2728	.0952	-.0246	.0392	.0210	.0212	.0301
60.000			.8580	.3743	.0163	-.0997	-.2115	.3449	.4720	-.0296	-.0450	.0379	.0654	.0765	.0796
90.000	1.0720		.7215	.2490	-.1343	-.2335	-.1945	.3933	.4130	-.3448	-.1352	.0129	.0909	.0934	
120.000			.5415	.0720	-.2744	-.3426	-.3843	-.0227	.1155	-.2185	-.3407	-.2191	.0401	.1327	.1044
150.000								-.1198		-.0492		-.2349		.1380	
180.000			.4176	-.0453	-.3630	-.4278	-.4601	-.2252	-.1125	.1308	-.0239	-.2280	.0091	.0359	.0439
210.000				-.1070	-.4087	-.4663	-.4435	-.2480	.0212	.2688	.2330	-.0272	.0212	.0006	.0474
240.000	1.0720	.7435	.3167	-.1316	-.4199	-.4568	-.4018	-.1213	.0946	.2959	.3234	-.4116	-.0392	-.0496	.0111
270.000		.7115							.4707						

K/LT	.7460	.8530	.9280
PMI			
.000	.0220	.0719	.0026
30.000	.0896	.1738	.0511
60.000	.1219	.2382	.1060
90.000	.1623	.2090	
120.000	.2028	.2584	.6394
135.000		.3734	.5128
150.000		.3501	.5785
165.000		.3350	.6071
180.000	.1745	.2751	.3960

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK (RB1732)

ALPHA(11) = 9.980 BETA( 3) = -5.920

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.0890	1.1580	.8031	.3172	-.0746	-.1308	-.2432	-.1843	.2318	.1699	.0239	-.0116	-.0275	-.0367	-.0088
30.000			.8616	.3715	-.0272	-.1086	-.2025	-.1098	.3091	.1402	-.0343	.0354	.0207	.0250	.0432
60.000			.8076	.3225	-.0679	-.1426	-.2547	.2813	.4752	-.0020	-.0434	.0415	.0331	.0662	.0642
90.000		1.0200	.6629	.1901	-.1794	-.2552	-.2577	.3631	.3984		-.3354	-.1020	.0180	.0722	.0543
120.000			.4981	.0326	-.3016	-.3719	-.4316	-.0402	-.1048	-.1592	-.3522	-.2412	.0329	.1217	.0808
135.000								-.1949		-.0228		-.2770		.1051	
150.000			.3916	-.0650	-.3796	-.4377	-.4293	-.2772	-.0170	.2087	-.0005	-.2716	.0094	.0121	.0154
165.000				-.1099	-.4084	-.4638	-.4349	-.2268	.0763	.2763	.2333	-.0737	.0243	.0124	.0328
180.000	1.0890	.7347	.3170	-.1322	-.4114	-.4636	-.1602	-.1144	.0451	.2776	.3030	-.3689	-.0331	-.0297	.0005
270.000		.7558							.3999						

X/LT .7480 .8530 .9280

PM1

.000	.0331	.1029	.0380
30.000	.0697	.1647	.0342
60.000	.0884	.2057	.0722
90.000	.1197	.1469	
120.000	.1740	.2517	.0360
135.000	.2015	.3508	.4767
150.000	.1804	.3384	.5261
165.000	.1963	.3301	.5327
180.000	.1725	.2893	.3635

ALPHA(11) = 9.980 BETA( 4) = -3.970

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PM1															
.000	1.1100	1.1800	.8180	.3253	-.0632	-.1439	-.2400	-.1860	.2699	.2155	.0433	-.0067	-.0121	-.0067	.0363
30.000			.8391	.3450	-.0503	-.1300	-.2241	-.1455	.3314	.1744	-.0280	.0151	.0148	.0353	.0388
60.000			.7607	.2725	-.1091	-.1832	-.2892	.1460	.4820	.0226	-.0466	.0227	.0479	.0770	.0666
90.000		.9855	.6166	.1443	-.2172	-.2919	-.3486	.2918	.3978		-.3271	-.0868	.0313	.0722	.0361
120.000			.4709	-.0001	-.3245	-.3915	-.4544	-.0595	-.0069	-.1651	-.3567	-.2022	.0424	.0916	.0560
135.000								-.1571		-.0005		-.2836		.0631	
150.000			.3847	-.0783	-.3858	-.4392	-.4190	-.1498	.0476	.2177	-.0001	-.2514	-.0034	-.0148	-.0117
165.000				-.1077	-.4087	-.4554	-.3249	-.0653	.0657	.2515	.2031	-.1274	-.0105	.0090	.0194
180.000	1.1100	.7418	.3256	-.1335	-.4089	-.4556	-.0863	-.0893	.0153	.2568	.2815	-.1828	-.0541	-.3115	-.0016
270.000		.8032							.4204						

X/LT .7480 .8530 .9280

PM1

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12+S12N23+AT10 EXTERNAL TANK (R91732)

ALPHA(11) = 9.980 BETA( 4) = -3.970

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .6530 .9280

PMI  
 .000 .0441 .0992 .0726  
 30.000 .0671 .1901 .0683  
 60.000 .0727 .1833 .0693  
 90.000 .0929 .1308  
 120.000 .1530 .2681 .5332  
 135.000 .1646 .3210 .4053  
 150.000 .1433 .3316 .4410  
 165.000 .1708 .3169 .4932  
 180.000 .1531 .2797 .3683

ALPHA(11) = 9.950 BETA( 5) = -1.970

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5090 .5580 .6380

PMI  
 .000 1.1230 1.1900 .8214 .3304 .0583 -.1407 -.2346 -.1862 .2975 .2358 .0578 .0040 -.0003 .0087 .0552  
 30.000 .0091 .0161 .0721 .0721 .1551 .2453 .1953 .3340 .2031 .2031 .0123 .0084 .0032 .0323 .0612  
 60.000 .0780 .0021 .1516 .2264 .3250 .1351 .4890 .0440 .0440 .0505 .0165 .0102 .0620 .0642  
 90.000 .5674 .1104 .2457 .3275 .4094 .1813 .4111 .4111 .4111 .3140 .1981 .0077 .0501 .0345  
 120.000 .4397 .0261 .3423 .4489 .4598 .0845 .0329 .0329 .1297 .3305 .2126 .0374 .0723 .0324  
 135.000 .3758 .0379 .3898 .4422 .4132 .1156 .0707 .0707 .0576 .0115 .2433 .0113 .0124 .0143  
 150.000 .1116 .4030 .4551 .0958 .0958 .0219 .0219 .0219 .2609 .2229 .1335 .0113 .0156 .0261  
 165.000 .3322 .1257 .4057 .14537 .14537 .0997 .0997 .0997 .2740 .3021 .1630 .0334 .0126 .0239  
 180.000 .3322 .1257 .4057 .14537 .14537 .0997 .0997 .0997 .2740 .3021 .1630 .0334 .0126 .0239  
 270.000 .6550

X/LT .7480 .6530 .9280

PMI  
 .000 .0594 .0987 .1048  
 30.000 .0644 .1247 .1069  
 60.000 .0679 .1703 .1469  
 90.000 .0921 .1396  
 120.000 .1228 .2358 .3912  
 135.000 .1304 .2608 .2888  
 150.000 .1185 .2479 .2906  
 165.000 .1399 .2554 .4160  
 180.000 .1297 .2256 .3341



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01-112+12425+AT10 EXTERNAL TANK (R81732)

ALPHA(11) = 9.900 BETA( 6 ) = .030

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
V/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
Wt																
.000	1.1290	1.1930	.8211	.3286	-.0617	-.1421	-.2356	-.1822	.3258	.2409	.2606	.0081	.0026	.0087	.0332	.0332
30.000			.7722	.2801	-.0999	-.1828	-.2699	-.2218	.3394	.2166	.5116	-.0147	-.0230	.0082	.0442	.0442
60.000			.6826	.1672	-.1937	-.2672	-.3632	-.1955	.4936	.0566	-.0454	-.0330	-.0088	.0364	.0350	.0350
90.000		.6923	.5134	.0435	-.12938	-.3539	-.4827	.0675	.4162	.4162	.3153	-.3322	-.0304	.0207	.0180	.0180
120.000			.4355	-.0557	-.3677	-.4287	-.5662	-.0845	.0472	-.0997	-.3219	-.2267	.0241	.0545	.0203	.0203
150.000							-.0815		.0894	.0894		-.2952		.0416		
180.000			.3805	-.0956	-.3953	-.4485	-.4193	-.0695	.0815	.2603	.0114	-.2160	-.0368	-.0311	-.0293	-.0293
210.000				-.1175	-.4052	-.4527	-.1044	-.1028	.0076	.2885	.2482	-.1482	-.0236	.0122	.0288	.0288
240.000	1.1290	.7429	.3320	-.1222	-.4034	-.4577	-.1176	-.1153	.0179	.2890	.3102	-.1669	-.0381	.0187	.0377	.0377
270.000		.9065							.4094							

V/LT .7480 .8330 .9280

Wt																
.000	.0614	.0713	.1134													
30.000	.0525	.0948	.1136													
60.000	.0571	.1598	.1763													
90.000	.0803	.1999														
120.000	.1153	.1982	.2668													
150.000	.1166	.2222	.1958													
180.000	.0994	.2052	.1869													
210.000	.1340	.2241	.2891													
240.000	.1370	.2236	.2607													

ALPHA(11) = 9.900 BETA( 7 ) = 2.060

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
W/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
Wt																
.000	1.1290	1.1880	.6193	.3266	-.0644	-.1420	-.2367	-.1841	.3306	.2307	.3549	-.0036	-.0046	.0063	.0599	.0599
30.000			.7359	.2470	-.1303	-.2064	-.2944	-.2474	.3746	.2136	-.0234	-.0414	-.0457	-.0241	.0385	.0385
60.000			.5576	.1172	-.2330	-.3028	-.3960	-.2638	.4998	.0901	-.0377	-.0544	-.0185	.0244	.0331	.0331
90.000		.8468	.4636	.0003	-.3291	-.3926	-.4691	.0149	.4231	.4231	-.3404	-.4136	-.0079	.0116	.0063	.0063
120.000			.2767	-.0771	-.3865	-.4439	-.5077	-.0645	.0697	-.0836	-.3511	-.2244	.0237	.0365	.0096	.0096
150.000								-.0416		.1014		-.3050		.0260		
180.000			.3457	-.1119	-.4003	-.4523	-.1828	-.1074	.0331	.2611	.0161	-.2603	-.0331	-.0392	-.0367	-.0367
210.000				-.1214	-.4032	-.4558	-.1049	-.1006	.0196	.2815	.2397	-.1630	-.0318	.0048	.0229	.0229
240.000	1.1290	.7421	.3334	-.1279	-.4062	-.4540	-.1256	-.1069	.0234	.2684	.2956	-.1622	-.0468	.0149	.0275	.0275
270.000		.9553							.4099							

V/LT .7480 .8330 .9280

Wt																
.000	.0614	.0713	.1134													
30.000	.0525	.0948	.1136													
60.000	.0571	.1598	.1763													
90.000	.0803	.1999														
120.000	.1153	.1982	.2668													
150.000	.1166	.2222	.1958													
180.000	.0994	.2052	.1869													
210.000	.1340	.2241	.2891													
240.000	.1370	.2236	.2607													

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DATE 26 JAN 73

ESTIMATED PRESSURE DATA - 1A14A - VOL. 9

(RB1 T32)

10001-706 1A14 00+V12+S12N25+AT10 EXTERNAL TANK

6-140

SECTION 11 EXTERNAL TANK

DEPENDENT VARIABLE CF

SECTION (INTERNAL TAX)	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	23
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[illegible]

REF ID: A66010

## SECTION 1: INTERNAL TASK

REPRESENT VARIABLE CF

[illegible]



DATE 08 JAN 79 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 CR+T12+S12N25+AT10 EXTERNA TANK (R81132)

ALPHA(11) = 10.030 BETA(11) = 0.180

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8530 .9280

PMI	0.000	.0220	.0666	.0501
50.000	.0131	.0463	.0196	
60.000	.1403	.1326	.1109	
90.000	.0483	.1645		
120.000	.1029	.1762	.2203	
135.000	.0976	.1762	.1360	
150.000	.0719	.1351	.0361	
165.000	.0864	.1809	.2574	
180.000	.0656	.1477	.2409	

ALPHA(11) = 10.070 BETA(11) = 0.230

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0060 .0490 .1130 .1780 .1940 .2170 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI	0.000	.0320	1.0910	.7490	.2900	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
50.000	.0467	.0329	.0329	.0467	.0329	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309 <td>-.0513</td> <td>-.0710</td> <td>.0817</td> <td>-.0696</td>	-.0513	-.0710	.0817	-.0696
60.000	.0359	.0359	.0359	.0359	.0359	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
90.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
120.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
135.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
150.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
165.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
180.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696
210.000	.0403	.0403	.0403	.0403	.0403	-.0506	-.1571	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	.0817	-.0696

K/LT .7460 .8530 .9280

PMI	0.000	-.0165	.0229	-.0305
50.000	.0039	-.0165	.0229	-.0305
60.000	.0390	.1100	.0965	
90.000	.0295	.1340		
120.000	.0854	.1801	.2123	
135.000	.0719	.1375	.1245	
150.000	.0576	.1117	.0202	
165.000	.0328	.1350	.2502	
180.000	.0269	.1031	.2132	



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9 (RB1733) ( 17 APR 74 )

ARC11-716 1A14 01+112+S12425+AT10 EXTERNAL TANK

REFERENCE DATA  
 SRFP = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 REL = 38.7000 INCHES YMRP = .0000 INCHES  
 BRFP = 38.7000 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

MACH = 1.250 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

ALPHA(1) = -10.340 BETA(1) = -9.910

SECTION (1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/L		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
CHI																
.000	1.1040	.7561	.3432	-.0811	-.3392	-.3850	-.4078	-.3877	-.0334	.0296	-.1267	-.2428	-.2095	-.0826	-.0421	
30.000		.4374	.0058	-.2807	-.3461	-.4016	-.3643	-.2060	-.3830	-.4448	-.3133	-.1987	-.1421	-.1005		
90.000		.6147	.631	-.1551	-.2185	-.2954	-.1257	-.0433	-.4799	-.5328	-.4858	-.2834	-.0878	-.0465		
120.000	1.11740	.8197	.3469	-.0057	-.0794	-.1564	.4011	.5214	-.2839	-.2218	-.2821	-.1926	-.0700			
135.000		.9321	.4761	.0987	.0203	-.0737	.0032	.5683	.1741	.4439	.3501	.2256	.1027	-.0096		
150.000							.0141		.3811	.3117			.1284			
165.000		.9734	.4855	.1123	.0336	-.0714	.3995	.5684	.5042	.2734	.0292	-.0335	-.0280			
180.000			.4448	.0671	-.0088	-.101	-.0620	.3218	.5955	.5243	.2634	.0027	-.0893	-.0708		
270.000	1.1040	1.2460	.8439	.5765	.0149	-.0541	-.1381	-.1205	.2627	.5630	.5811	-.1521	-.0669	-.2187	-.1618	
X/LT	.7480	.8330	.9280													

ALPHA(2) = -10.260 BETA(2) = -7.920

ALPHA( 1 ) = -10.260      BETA( 2 ) = -7.920																
SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/L		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
CHI																
.000	1.1310	.7360	.3614	-.0570	-.3198	-.3656	-.3966	-.3751	-.0191	.0499	-.0952	-.2346	-.2236	-.0792	-.0434	
30.000			.4359	.0071	-.2786	-.3328	-.3956	-.3631	-.1701	-.7985	-.3594	-.3035	-.1786	-.1373	-.0983	
60.000			.5842	.1379	-.1787	-.2367	-.3151	-.2166	-.0487	-.4848	-.5201	-.4676	-.2608	-.1318	-.0494	
90.000	1.1300		.7672	.3064	-.0462	-.1138	-.1937	.1949	.5136	-.2839	-.2375	-.2985	-.2223	-.0759		
120.000			.9040	.4370	.0608	-.0151	-.1089	-.0617	.5703	.2012	.4189	.3037	.1858	.0725	-.0585	
135.000								-.0503		.4132		.2803		.1002		
150.000			.9488	.718	.0905	.0150	-.0936	-.0370	.4005	.3766	.4189	.2487	.0350	-.0457	-.0736	

ARC11-716 IA14 OA+T12+S12N23+AT10 EXTERNAL TANK

(RB1733)

ALPHA(1) = -10.260 BETA(2) = -7.920

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE C<sub>p</sub>

X/LT	.0000	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000	.5500	.6000
PMI													
165.000			.4372	.3644	-.0103	-.1076	-.3676	.3359	.5952	.6143	.1849	.0394	-.0858
180.000	1.1310	1.2530	.6581	.3853	.0236	-.0464	-.1020	-.1152	.2930	.5944	-.2030	-.0941	-.1718
270.000	.7590							.5654					

X/LT .7460 .8530 .9260

PMI

.000	-.2349	-.0174	-.0369
30.000	-.0725	-.0375	.0400
60.000	-.0710	-.0795	.0526
90.000	-.0955	-.3921	
120.000	-.0345	.0943	.6692
135.000	.0008	.1701	.4130
150.000	-.0239	.1714	.3777
165.000	-.0557	.1472	.6209
180.000	-.0649	.1312	.4522

ALPHA(1) = -10.250 BETA(3) = -5.920

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE C<sub>p</sub>

X/LT	.0000	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000	.5500	.6000
PMI													
.000	1.1610	.7602	.3729	-.0520	-.7113	-.3586	-.4008	-.3688	-.0004	.0583	-.0634	-.2279	-.2172
30.000			.4309	-.0015	-.2638	-.3397	-.3990	-.3546	-.1401	-.1908	-.3081	-.2897	-.1598
60.000			.5537	.1020	-.2075	-.2634	-.3373	-.2550	-.0485	-.4907	-.5078	-.4573	-.2647
90.000	1.0940		.7195	.2539	-.0864	-.1531	-.2377	.2116	.5042	-.2681	-.2523	-.3213	-.2482
120.000			.8514	.3981	.0211	-.0544	-.1412	-.1101	.5424	.2395	.3920	.2527	.1438
135.000								-.0785	.4433	.2462	.0807		
150.000			.3253	.4391	.0636	-.0113	-.1148	-.0597	.4033	.3773	.3373	.1807	.0135
165.000			.4275	.0557	-.0175	-.1148	-.0770	.3781	.6069	.5969	.1203	.0421	-.0821
180.000	1.1610	1.2710	.8735	.3914	.0275	-.0437	-.1303	-.1130	.3240	.6033	.6004	-.2389	-.0203
270.000	.8112							.4390					

X/LT .7460 .8530 .9260

PMI

.000	-.0455	.0014	-.0388
30.000	-.0699	-.0279	.0146
60.000	-.0632	-.0427	.0739
90.000	-.0660	-.2544	
120.000	-.0587	.0334	.5680
135.000	-.0260	.1535	.3678
150.000	-.0445	.1569	.3422



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-7:6 IA14 01+T12+S12N23+AT10 EXTERNAL TANK (R81733)

ALPHA( 1 ) = -10.240 BETA( 3 ) = -3.920

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

Phi

165.000 -.0365 .1385 .5455  
180.000 -.0344 .1256 .3957

ALPHA( 1 ) = -10.240 BETA( 4 ) = -3.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0090 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

Phi

.000 1.1780 .7798 .3865 -.0415 -.3045 -.3530 -.4047 -.3549 -.0074 .0777 -.0359 -.2271 -.2193 -.0444 -.0208  
30.000 .4271 -.0044 -.2849 -.3388 -.3971 -.3503 -.1081 -.1161 -.2609 -.2775 -.1536 -.1026 -.0639  
60.000 .5255 .0773 -.2236 -.2816 -.3601 -.2814 -.0361 -.4817 -.5052 -.4483 -.2459 -.1237 -.0572  
90.000 1.0520 .6727 .2052 -.1226 -.1851 -.2635 .1269 .5009 .5009 .2718 .3660 .2042 .1102 .0148 -.1260  
120.000 .8137 .3449 -.0147 -.0882 -.1749 -.1470 .5019 .4607 .4607 .1861 .0217  
135.000 .8964 .4125 .0406 -.0312 -.1371 -.0851 .4012 .5708 .3179 .0642 -.0051 -.0985 -.1569  
150.000 .4209 .0513 -.0287 -.1221 -.0864 .3806 .6130 .5837 .5810 .0342 -.1060 -.1488  
165.000 1.1780 1.2720 .8838 .3996 .0326 -.0424 -.1294 -.1022 .3148 .5976 .6218 .1762 -.0033 -.0938 -.1888  
180.000 .8594

X/LT .7460 .8530 .9280

Phi

.000 -.0395 -.0107 -.0480  
30.000 -.0562 -.0183 -.0012  
60.000 -.0562 -.0115 .0776  
90.000 -.0580 -.1423  
120.000 -.0719 .0263 .5175  
135.000 -.0562 .1136 .3248  
150.000 -.0738 .1268 .2926  
165.000 -.0631 .1398 .4763  
180.000 -.0425 .1136 .3880

ORIGINAL PAGE IS  
OF POOR QUALITY

(RB1733)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 1 ) = -10.250 BETA( 5 ) = -1.970

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1940	.7928	.3954	-.0396	-.2589	-.3471	-.3983	-.3544	.0006	.0939	-.0159	-.2228	-.2278	-.0431	-.0110
30.000			.4184	-.0165	-.2902	-.3412	-.3955	-.3497	-.0821	-.0812	-.2251	-.2660	-.1632	-.1009	-.0503
60.000			.4942	-.0508	-.2431	-.3012	-.3759	-.2067	-.0471	-.4424	-.5030	-.4140	-.2089	-.1114	-.0568
90.000		1.0110	.6240	.1612	-.1577	-.2201	-.3019	.0788	.5012		-.2630	-.3083	-.3371	-.2527	-.1094
120.000			.7636	.2925	-.0558	-.1271	-.2108	-.1784	.4540	.3128	.3350	.1575	.0749	-.0033	-.1571
135.000								-.1395	.4730	.4730		.1345		-.0206	
150.000			.8603	.3778	.0117	-.0803	-.1618	-.1161	.4252	.5829	.2924	-.0123	-.0141	-.1441	-.2001
165.000				.4042	.0366	-.0407	-.1338	-.0953	.3919	.6400	.5640	.0014	.0185	-.1159	-.1297
180.000	1.1940	1.2790	.8895	.4040	.0322	-.0405	-.1330	-.0712	.2660	.6162	.6304	-.1155	.0322	-.0680	-.1620
270.000		.9135							.4849						

X/LT .7460 .8530 .9280

PHI

.000	-.0321	-.0068	-.0415
30.000	-.0900	-.0076	.0020
60.000	-.0534	.0007	.0830
90.000	-.0565	-.0681	
120.000	-.0860	-.0454	.4188
135.000	-.0750	.0581	.2489
150.000	-.0924	.0859	.2339
165.000	-.0679	.1046	.4733
180.000	-.0752	.0817	.4255

ALPHA( 1 ) = -10.180 BETA( 6 ) = .020

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.7983	.3952	-.0365	-.2970	-.3458	-.3915	-.3602	.0074	.0917	-.0190	-.2287	-.2004	-.0402	-.0038
30.000			.4092	-.0232	-.2927	-.3432	-.3950	-.3472	-.0009	-.0535	-.2060	-.2075	-.1388	-.0832	-.0498
60.000			.4669	.0260	-.2621	-.3167	-.3883	-.1390	-.0289	-.4331	-.5370	-.2913	-.2271	-.0531	-.0289
90.000		.9632	.5758	.1158	-.1924	-.2524	-.3298	.0447	.5004		-.2614	-.3182	-.2177	-.1004	-.0897
120.000			.7155	.2459	-.0951	-.1633	-.2452	-.1657	.5936	.3189	.2961	.1286	.0449	-.0123	-.1796
135.000								-.1691	.4796	.4796		.0968		-.0620	
150.000			.8234	.3435	-.0170	-.0880	-.1857	-.1460	.4891	.6030	.2581	-.0711	-.0266	-.1874	-.2263
165.000				.3910	.0236	-.0568	-.1465	-.1073	.3375	.6413	.5430	-.0350	.0048	-.1100	-.1603
180.000	1.1980	1.2770	.8907	.3987	.0297	-.0494	-.1367	-.0712	.2539	.6009	.6219	-.1057	.0551	-.0916	-.1371
270.000		.9600							.4909						

X/LT .7460 .8530 .9280

PHI

.000	-.0321	-.0068	-.0415
30.000	-.0900	-.0076	.0020
60.000	-.0534	.0007	.0830
90.000	-.0565	-.0681	
120.000	-.0860	-.0454	.4188
135.000	-.0750	.0581	.2489
150.000	-.0924	.0859	.2339
165.000	-.0679	.1046	.4733
180.000	-.0752	.0817	.4255



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4633

ARC11-716 IAI4 01+712+S12K25+AT10 EXTERNAL TANK

(R81753)

ALPHA(1) = -10.160 BETA(6) = .020

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.0269	-.0071	-.0316
30.000	-.0600	-.0164	-.0277
60.000	-.0428	.0059	.1327
90.000	-.0480	.0119	
120.000	-.0472	-.0308	.2899
135.000	-.0553	.0576	.1561
150.000	-.0747	.0506	.1954
165.000	-.0543	.0836	.3141
180.000	-.0494	.0969	.2668

ALPHA(1) = -10.160 BETA(7) = 2.040

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .5980 .6380

PHI

.000	1.1920	.7949	.3940	-.0346	-.2994	-.3451	-.4019	-.3594	.0076	.0807	-.0330	-.2402	-.2083	-.0422	-.0075
30.000			.3988	-.0320	-.2981	-.3467	-.3973	-.3496	.0205	-.0006	-.1734	-.2208	-.1602	-.0600	-.0438
60.000			.4372	-.0013	-.2768	-.3304	-.3985	-.4451	.0001	-.3796	-.5251	-.2480	-.2176	-.0929	-.0331
90.000		.9186	.5291	.0776	-.2240	-.2823	-.3535	-.0080	.4884		-.2753	-.3302	-.1641	-.1048	-.0937
120.000			.6598	.1954	-.1352	-.1995	-.2774	-.1958	.5359	.3448	.2569	.1046	.0241	-.0412	-.1954
135.000								-.1896		.4713	.0510			-.1009	
150.000			.7817	.3016	-.0492	-.1173	-.2127	-.1735	.4639	.5835	.1821	-.0963	-.0665	-.2153	-.2438
165.000				.3678	.0064	-.0705	-.1509	-.1200	.3227	.5980	.5116	.0152	.0171	-.0828	-.1640
180.000	1.1920	1.2690	.8832	.3959	.0256	-.0491	-.1415	-.0664	.2597	.5597	.5970	-.0475	.0259	-.1072	-.1870
270.000		1.0070													.4865

X/LT .7460 .8530 .9280

PHI

.000	-.0341	-.0062	-.0250
30.000	-.0515	-.0108	.0030
60.000	-.0351	.0091	.1402
90.000	-.0372	.0303	
120.000	-.0367	.0039	.2143
135.000	-.0606	.0402	.0957
150.000	-.0733	.0332	.0815
165.000	-.0543	.0708	.2676
180.000	-.0686	.0939	.2272

ARC11-716 IA14 OM-T12-S12MS+AT10 EXTERNAL TANK (RB1T33)

ALPHA(1) = -10.220 BETA(8) = 4.080

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6780
PHI															
.000	1.1800	.7791	.3830	-.0426	-.3041	-.3525	-.3968	-.3672	-.0009	.0515	-.0596	-.2431	-.2105	-.0484	-.0243
30.000			.3765	-.0499	-.3061	-.3520	-.4022	-.3473	-.0177	.0432	-.1499	-.2366	-.1750	-.0496	-.0336
60.000			.3992	-.0333	-.2987	-.3441	-.4105	-.1325	-.0278	-.3305	-.5164	-.2207	-.1848	-.1229	-.0490
90.000		.8637	.4725	.0338	-.2577	.1110	-.3802	-.0447	.4833		-.2796	-.3408	-.1542	-.1116	-.0978
120.000			.5998	.1409	-.1732	-.2359	-.3136	-.1192	.4027	.3686	.2393	.0881	.0024	-.0705	-.2066
135.000								-.2277		.4433		.0235		-.1259	
150.000			.7550	.2602	-.0800	-.1476	-.2406	-.2057	.3578	.4794	.1935	-.1329	-.0788	-.2532	-.2816
165.000				.3462	-.0127	-.0855	-.1768	-.1371	.2957	.5059	.4894	.0427	.0414	-.0931	-.1757
180.000	1.1800	1.2680	.8776	.3815	.0224	-.0491	-.1426	-.0506	.2460	.5033	.5875	-.1350	.0164	-.1534	-.1816
270.000		1.0550							.4881						
X/LT	.7480	.8530	.9280												

PHI

.000	-.0489	-.0186	-.0216												
30.000	-.0582	-.0157	-.0185												
60.000	-.0429	.0022	.1357												
90.000	-.0471	.0177													
120.000	.0375	-.0010	.1341												
135.000	-.0814	.0068	.0390												
150.000	-.0934	-.0142	-.0211												
165.000	-.0641	.0406	.1654												
180.000	-.0845	.0582	.1545												

ALPHA(1) = -10.830 BETA(9) = 6.080

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6780
PHI															
.000	1.1810	.7589	.3716	-.0523	-.3132	-.3593	-.4100	-.3754	-.0124	.0800	-.0650	-.2343	-.2375	-.0530	-.0356
30.000			.3603	-.0645	-.3178	-.3598	-.4044	-.2904	-.0276	.0556	-.1431	-.2354	-.1848	-.0567	-.0570
60.000			.3678	-.0575	-.3102	-.3535	-.4163	-.1387	-.1317	-.2862	-.5006	-.1949	-.1569	-.1438	-.0658
90.000		.8154	.4200	-.0023	-.2801	-.3329	-.2940	-.0317	.3943		-.2963	-.3593	-.1324	-.1235	-.1087
120.000			.5784	.0995	-.2091	-.2654	-.3399	.0999	.1661	.3611	.8368	.0724	-.0134	-.0983	-.2320
135.000								-.0333		.4249		-.0066		-.1532	
150.000			.6876	.2189	-.1117	-.1764	-.2679	-.2334	.2408	.4118	.1784	-.2038	-.0992	-.3019	-.3058
165.000				.9215	-.0312	-.1051	-.1930	-.1491	.2736	.4710	.4478	.0445	.0380	-.1183	-.1993
180.000	1.1810	1.2220	.8650	.3814	.0165	-.0586	-.1472	-.0323	.2563	.4630	.5738	-.2027	-.0320	-.1360	-.2281
270.000		.0930							.4911						
X/LT	.7480	.8530	.9280												

PHI



ARC11-716 1A14 01+112+512N25+AT10 EXTERNAL TANK (RB1733)

ALPHA(1) = -10.230 BETA( 9) = 6.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PHI  
 .000 -.0524 -.0342 -.0475  
 30.000 -.0724 .0009 -.0387  
 60.000 -.0552 .0248 .1369  
 90.000 -.0779 -.0131  
 120.000 -.0905 -.0123 .1216  
 150.000 -.1098 -.0112 .0294  
 180.000 -.1178 -.0357 -.0564  
 210.000 -.1012 .0071 .1670  
 240.000 -.1134 .0055 .1750

ALPHA(1) = -10.230 BETA(10) = 8.120

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0190 .0490 .1130 .1790 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380  
 PHI  
 .000 1.1300 .7314 .3968 -.0906 -.3153 -.3681 -.4167 -.3869 -.0340 .0405 -.1014 -.2377 -.2803 -.0725 -.0328  
 30.000 .3994 -.0800 -.3257 -.3599 -.4116 -.1969 -.0392 .0678 -.1511 -.2344 -.1725 -.0496 -.0409  
 60.000 .3471 -.0761 -.3270 -.3599 -.2044 -.1291 -.1651 -.2071 -.4702 -.1835 -.1334 -.1156 -.0437  
 90.000 .7591 .0240 .0353 -.3082 -.0964 -.1275 .2851 .2897 -.3706 -.1454 -.1284 -.0941  
 120.000 .4353 .0592 -.2393 -.2992 -.3602 .0220 .1100 .2784 .2566 .0424 -.0238 -.1284 -.2394  
 150.000 .6429 .1895 -.1387 -.2027 -.2924 -.2554 .1913 .4094 .1771 -.2394 -.0358 -.1903  
 180.000 .3021 -.0459 -.1184 -.2096 -.1583 .2176 .3614 .4509 .1771 .2394 -.1373 -.3449 -.3067  
 210.000 1.1300 1.1840 .8450 .3767 .0150 -.0617 -.1503 -.2511 .4011 .4509 .0184 -.0332 -.1472 -.2392  
 240.000 1.1320 .11320 .2511 .4145 .5645 -.1642 -.0381 -.1628 -.2547

K/LT .7460 .8330 .9280

PHI  
 .000 -.0429 -.0305 -.0446  
 30.000 -.0619 -.0224 -.0519  
 60.000 -.0471 -.0025 .1257  
 90.000 -.1048 -.0607  
 120.000 -.1030 -.0329 .1249  
 150.000 -.1251 -.0113 .1290  
 180.000 -.1355 -.0407 -.0738  
 210.000 -.1220 -.0177 .1397  
 240.000 -.1449 -.0203 .1296

ORIGINAL FILE  
OF DATA



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14 - VOL. 9

(RB1733)

ARC11-716 IAI14 C1+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 1 ) = -10.240 BETA( 11 ) = 10.110

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1030	.6998		.3369	-.0800	-.3353	-.3947	-.4333	-.4020	-.0485	-.0180	-.1537	-.2412	-.1659	-.0722	-.0391
30.000			.3122	-.1065	-.3419	-.3827	-.4259	-.1357	-.1357	-.0467	.0315	-.1730	-.2434	-.1322	-.0589	-.0749
60.000			.3099	-.1049	-.3432	-.3811	-.4344	-.1334	-.1334	-.1616	-.1094	-.4265	-.1591	-.1069	-.0879	-.0721
90.000		.7107	.3400	-.0764	-.3368	-.3947	-.0946	-.1559	-.2148		.3225	-.2790	-.3747	-.1591	-.1124	-.1152
120.000			.4436	.0106	-.2783	-.3356	-.1549	-.0278	.0958	.3225	.3740	.2521	.0075	-.0277	-.1457	-.2697
135.000								-.0113				-.0730	-.2114		-.2114	
150.000			.5957	.1421	-.1735	-.2361	-.3241	-.2439	.1467	.1467	.3142	.1191	-.3012	-.1510	-.3903	-.3479
165.000				.2750	-.0686	-.1414	-.2297	-.1704	.1591	.0256	.4717	.4717	.0079	-.0803	-.1688	-.2611
180.000	1.1030	1.1330	.8416	.3650	.0061	-.0685	-.1595	-.0503	.2114	.3730	.5434	.5434	-.1148	-.0443	-.2429	-.3087
270.000		1.1710								.5096						

X/LT .7460 .8530 .9280

PHI																
.000			-.0635	-.0454	-.0105											
30.000			-.0830	-.0287	-.0480											
60.000			-.0721	-.0384	.1474											
90.000			-.1316	-.0917												
120.000			-.1228	-.0555	.1000											
135.000			-.1480	-.0375	-.0038											
150.000			-.1628	-.0659	-.1060											
165.000			-.1563	-.0519	.0889											
180.000			-.2014	-.0667	.0946											

ALPHA( 2 ) = -8.220 BETA( 1 ) = -9.940

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1320	.7594		.3895	-.0390	-.3138	-.3636	-.4137	-.3651	-.0330	-.0015	-.1621	-.2272	-.1788	-.0822	-.0364
30.000			.4978	.0550	-.2446	-.3026	-.3697	-.3346	-.1486	-.1486	-.3124	-.4646	-.2722	-.1780	-.1267	-.0855
60.000			.6666	.2042	-.1230	-.1881	-.2717	-.1403	.0364	-.3912	-.3912	-.5272	-.4590	-.2295	-.0537	-.0084
90.000		1.2060	.8396	.3662	.0063	-.0684	-.1497	.2813	.5511	.5511	-.4220	-.4220	-.2201	-.2805	-.1804	-.0216
120.000			.9347	.4586	.0799	.0032	-.0909	-.0193	.5209	.5209	.0982	.3963	.3427	.2207	.0982	-.0089
135.000								-.0175		.2899	.2899		.2997		.1197	
150.000			.9301	.4511	.0751	-.0009	-.1041	-.0470	.3263	.3263	.5045	.4359	.2560	.0214	-.0362	-.0310
165.000			.3845	.0237	-.0316	-.1434	-.1044	.1044	.2598	.5368	.5368	.5915	.2583	-.0108	-.0931	-.0746
180.000	1.1320	1.2060	.7922	.3213	-.0264	-.0966	-.1768	-.1600	.2160	.2160	.5290	.5518	-.1546	-.0505	-.2314	-.1744
270.000		.7417								.3718						

X/LT .7460 .8530 .9280

PHI



ARC11-71.6 IAI4 OX+T12+S12N25+AT10 EXTERNAL TANK (R81733)

ALPHA( 2 ) = -0.220 BETA( 1 ) = -9.940

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .6330 .9280

PHI

.000	-.0559	-.0484	.0027
30.000	-.0867	-.0667	.0534
60.000	-.0616	-.0674	.0643
90.000	-.0850	-.3778	
120.000	-.0201	.1013	.7268
135.000	-.0133	.1769	.4864
150.000	-.0172	.2059	.4872
165.000	-.0589	.1901	.6266
180.000	-.0581	.1616	.4574

ALPHA( 2 ) = -0.240 BETA( 2 ) = -7.960

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

.000	1.1730	.7916	.4973	-.0273	-.2993	-.3505	-.3996	-.3550	-.0069	.0363	-.1155	-.2241	-.2087	-.0819	-.0356
30.000			.4895	.0900	-.2474	-.3058	-.3714	-.3377	-.1241	-.2808	-.3641	-.2646	-.1673	-.1375	-.0858
60.000			.6313	.1722	-.1907	-.2119	-.2965	-.2367	.0336	-.3954	-.5165	-.4565	-.2166	-.0979	-.0247
90.000	1.1060		.7883	.3168	-.0375	-.1076	-.1919	.0717	.5431		-.3949	-.2445	-.3062	-.1739	-.0346
120.000			.9909	.4129	.0414	-.0367	-.1269	-.0518	.5240	.1328	.3766	.2944	.1747	.0674	-.0809
135.000								-.0677		.3386	.2595	.2595		.0935	
150.000			.9089	.4240	.0519	-.0231	-.1290	-.0700	.3375	.5291	.3746	.2296	.0223	-.0546	-.0755
165.000			.3642	.0184	-.0531	-.1479	-.1096	.2655	.2655	.5586	.5857	.1854	.0102	-.1001	-.1061
180.000	1.1730	1.2220	.8113	.3328	-.0212	-.0903	-.1709	-.1555	.2330	.5367	.5746	-.2092	-.0913	-.1864	-.1155
270.000		.7980							.3721						

X/LT .7480 .6330 .9280

PHI

.000	-.0292	-.0161	-.0208
30.000	-.0622	-.0333	.1429
60.000	-.0409	-.0109	.0936
90.000	-.0465	-.2332	
120.000	-.0359	.0712	.6647
135.000	-.0151	.1748	.4578
150.000	-.0325	.1981	.4174
165.000	-.0562	.1817	.6114
180.000	-.0617	.1605	.4532

ORIGINAL PAGE IS  
OF POOR QUALITY

(RB1T33)

ARC11-716 1A14 01+712+512N25+AT10 EXTERNAL TANK

ALPHA(1,2) = -0.240 BETA(1,3) = -3.980

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2000	.8187	.4176	-.0159	-.2871	-.3350	-.3892	-.3423	.0065	.0784	-.0719	-.2129	-.2207	-.0504	-.0295
30.000		.4844	.0408	-.2507	-.3083	-.3699	-.3337	-.0832	-.1781	-.2961	-.2583	-.2583	-.1519	-.1162	-.0659
60.000		.6000	.1378	-.1766	-.2373	-.3143	-.2687	.0339	-.3982	-.5054	-.4393	-.2326	-.0993	-.0469	
90.000		1.1260	.7420	.2660	-.0782	-.1455	-.2055	-.0341	.5361	-.1115	-.2680	-.3277	-.2199	-.0794	
120.000			.8462	.3665	.0026	-.0707	-.1600	-.1288	.5304	.1645	.3598	.2419	.1363	.0365	-.1056
135.000							-.1068			.5776		.2269		.0582	
150.000			.8839	.3977	.0274	-.0455	-.1470	-.0941	.3376	.5375	.2964	.1541	.0068	-.0664	-.1189
165.000				.3759	.0398	-.0628	-.1553	-.1153	.2876	.5536	.3669	.1003	.0407	-.0927	-.1441
180.000		1.2000	1.2340	.8230	.3355	-.0173	-.0892	-.1709	.2548	.5360	.5814	-.2440	-.0222	-.1866	-.1805
270.000		.8499							.4269						

X/LT .7460 .8330 .9280

PHI

.000	-.3390	.0066	-.0240
30.000	-.0619	-.0225	.0287
60.000	-.0474	.0040	.1072
90.000	-.0326	-.1102	
120.000	-.0864	.0434	.6181
135.000	-.0445	.1593	.4170
150.000	-.0538	.1816	.3765
165.000	-.0640	.1642	.5484
180.000	-.0530	.1502	.4022

ALPHA(1,2) = -0.250 BETA(1,4) = -3.980

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2170	.8341	.4290	-.0108	-.2785	-.3300	-.3845	-.3449	.0117	.1030	-.0368	-.2170	-.1867	-.0420	-.0124
30.000		.4757	.0294	-.2548	-.3092	-.3715	-.3288	-.0654	-.0654	-.0755	-.2556	-.2306	-.1365	-.1122	-.0870
60.000		.5670	.1083	-.1978	-.2552	-.3324	-.2915	.0398	-.3982	-.5392	-.3347	-.2396	-.0100	-.0163	
90.000		1.0890	.6928	.2187	-.1128	-.1784	-.2602	-.0341	.5299	-.3673	-.2901	-.2944	-.0792	-.0584	
120.000			.6023	.3226	-.0324	-.1030	-.1874	-.1617	.4408	.2055	.3532	.1930	.1029	.0145	-.1248
135.000							-.1327			.4030		.1648		.0225	
150.000			.8601	.3708	.0047	-.0653	-.1675	-.1135	.3364	.5173	.2801	.0442	-.0136	-.0971	-.1534
165.000				.3704	.0065	-.0689	-.1600	-.1234	.2984	.5434	.3540	.0615	.0288	-.1124	-.1503
180.000		1.2170	1.2400	.8345	-.0104	-.0832	-.1657	-.1361	.2406	.5320	.6064	-.1862	-.0216	-.0989	-.1885
270.000		.8916							.4858						

X/LT .7460 .8330 .9280

PHI



ARC11-716 IAI4A DX+TIC+S12K25+AT10 EXTERNAL TANK

(R01733)

ALPHA( 2) = -8.250 BETA( 4) = -3.930

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT .7480 .8530 .9280

TWT

.000 -.0341 -.0157 -.0081  
 30.000 -.0497 -.0321 -.0515  
 60.000 -.0344 -.0012 .1292  
 90.000 -.0634 .0073  
 120.000 -.1113 .0117 .5321  
 150.000 -.0731 .1266 .3740  
 180.000 -.0807 .1534 .3335  
 165.000 -.0692 .1663 .4758  
 180.000 -.0507 .1357 .3905

ALPHA( 2) = -8.250 BETA( 5) = -1.990

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

TWT

.000 1.2260 .6449 .4399 -.0033 -.2739 -.3240 -.3812 -.3400 .0164 .1139 -.0131 -.2072 -.1989 -.0430 .0070  
 30.000 .4665 .0196 -.2614 -.3156 -.3718 -.3240 -.0599 .0311 -.1959 -.2281 -.1425 -.0932 -.0529  
 60.000 .5365 .0815 -.2192 -.2753 -.3496 -.2929 .0326 -.3896 -.5208 -.2881 -.2380 -.0857 -.0165  
 90.000 .6433 .1737 -.1474 -.2127 -.2929 .0876 .5328 -.3325 -.3082 -.2684 -.0774 -.0722  
 120.000 .7513 .2762 -.0682 -.1384 -.2214 -.1949 .3713 .2441 .3347 .1557 .0821 -.0048 -.1610  
 150.000 .8239 .3375 -.0204 -.0900 -.1690 .1142 .1620 .4135 .1149  
 165.000 .8368 .3552 -.0343 -.0796 -.1731 .1348 .2078 .2885 .2765 .2765 .0259 -.0868 -.1377 -.1930  
 180.000 1.2280 1.2445 .8368 .3486 -.0386 -.0849 -.1680 -.1086 .5410 .0078 -.1813 -.1389  
 170.000 .9443 .2392 .5405 .0200 -.0719 -.1634 .5254

X/LT .7480 .8530 .9280

TWT

.000 -.0280 -.0069 -.0186  
 30.000 -.0378 -.0235 .0452  
 60.000 -.0457 .0122 .1477  
 90.000 -.0781 .0454  
 120.000 -.1178 .0462 .4303  
 150.000 -.0947 .0925 .2737  
 180.000 -.1059 .1163 .2482  
 165.000 -.0762 .1301 .4758  
 180.000 -.0749 .1014 .4196

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ARC11-716 1A14 01+112+512125+AT110 EXTERNAL TANK (RB1733)

ALMAC( 8 ) = -0.250 BETAO ( 6 ) = .010

## SECTION 11: EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
CHI	.000	1.2280	.8457	.4377	-.0064	-.2737	-.3260	-.3795	-.3441	.0206	.1113	-.0118	-.2121	-.1964	-.0429
30.000				.4907	-.0068	-.2681	-.3226	-.3775	-.3287	-.0291	-.0013	-.1675	-.2331	-.1482	-.0721
60.000				.5034	.5513	-.2426	-.2959	-.3682	-.3328	-.0037	-.3903	-.5162	-.2479	-.2377	-.0783
90.000			.9944	.5928	.1207	-.1839	-.2441	-.3225	.0487	.5337	-.2917	-.5332	-.1846	-.0921	-.0878
120.000				.7042	.2313	-.1064	-.1749	-.2543	-.2194	.3351	.2957	.2852	.1119	.0289	-.0157
150.000							-.1911			.4351	.4351	.0782		-.0813	
180.000				.7947	.3057	-.0475	-.1160	-.2112	-.1703	.3730	.5535	.2247	-.0837	-.0404	-.1920
210.000					.3414	-.0158	-.0933	-.1824	-.1426	.2576	.5920	.5105	-.0442	-.0071	-.1808
240.000		1.2280	1.2410	.8458	.3504	-.0115	-.0844	-.1740	-.1140	.2157	.5345	.5917	-.1255	.0470	-.0939
270.000			.9905							.5206					-.1450

W/L .7460 .8530 .9280

CHI

.000	-.0232	-.0366	-.0232
30.000	-.0366	-.0201	.0275
60.000	-.0432	.0183	.1871
90.000	-.0633	.0601	
120.000	-.0520	.0016	.3078
150.000	-.0602	.0553	.1741
180.000	-.0797	.0751	.2011
210.000	-.0516	.1327	.3376
240.000	-.0525	.1139	.2637

ALMAC( 8 ) = -0.250 BETAO ( 7 ) = 2.020

## SECTION 11: EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
CHI	.000	1.2270	.8455	.4364	-.0041	-.2742	-.3243	-.3833	-.3433	.0210	.1023	-.0163	-.2092	-.2364	-.0342
30.000				.4364	-.0036	-.2742	-.3261	-.3833	-.3293	-.0046	.0299	-.1355	-.2480	-.1593	-.0844
60.000				.4716	.0214	-.2594	-.3129	-.3768	-.2759	-.0298	-.3542	-.5142	-.2168	-.1897	-.1313
90.000			.9914	.5475	.0912	-.2148	-.2744	-.3464	.0177	.5577	-.2723	-.5342	-.1334	-.0923	-.0915
120.000				.6581	.1821	-.1424	-.2094	-.2868	-.2078	.5243	.2930	.2430	.0845	.0024	-.0404
150.000							-.2122			.4446	.4446	.0433		-.1017	
180.000				.7309	.2700	-.0739	-.1436	-.2345	-.1975	.3949	.5597	.1561	-.1080	-.0706	-.2103
210.000					.3244	-.0795	-.1058	-.1931	-.1546	.2117	.5535	.4780	-.0022	.0003	-.0831
240.000		1.2270	1.2360	.8471	.3477	-.0126	-.0857	-.1760	-.1286	.2174	.5051	.5662	-.0865	.0176	-.1090
270.000			.9900							.5205					-.1978

W/L .7460 .8530 .9280

CHI

.000	-.0232	-.0366	-.0232
30.000	-.0366	-.0201	.0275
60.000	-.0432	.0183	.1871
90.000	-.0633	.0601	
120.000	-.0520	.0016	.3078
150.000	-.0602	.0553	.1741
180.000	-.0797	.0751	.2011
210.000	-.0516	.1327	.3376
240.000	-.0525	.1139	.2637



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(R81733)

APC11-716 IAL14 06+12-S:2125+AT110 EXTERNAL TANK

ALPHA (2) = -0.230 BETA (2) = 2.080

DEPENDENT VARIABLE CP

SECTION 11 EXTERNAL TANK

K/LT .7460 .8330 .9280

PMI  
 .000 -0.0266 -0.0097 -0.0286  
 30.000 -0.0499 -0.0112 -0.0312  
 60.000 -0.0335 -0.0223 -0.0508  
 90.000 -0.0467 -0.0373  
 120.000 -0.0350 -0.0371 -0.2264  
 135.000 -0.0660 -0.0630 -0.087  
 150.000 -0.0723 -0.0576 -0.0723  
 165.000 -0.0611 -0.0611 -0.2768  
 180.000 -0.0773 -0.1108 -0.2308

ALPHA (2) = -0.230 BETA (2) = 4.040

SECTION 11 EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6080  
 PMI  
 .000 1.2190 .0335 .4293 -0.0089 -0.2772 -0.3283 -0.3837 -0.3478 .0033 .0899 -0.0294 -0.2079 -0.2495 -0.0590 .0021  
 30.000 .4202 -0.0224 -0.2830 -0.3326 -0.3044 -0.3369 .0100 .0684 -0.1101 -0.2430 -0.1743 -0.0511 -0.0212  
 60.000 .4344 -0.0076 -0.2784 -0.3275 -0.3831 -0.2562 -0.0161 -0.3126 -0.4955 -0.2048 -0.1355 -0.1667 -0.0504  
 90.000 .4939 -0.0485 -0.2453 -0.2987 -0.3675 -0.3147 .0097 -0.2806 -0.3351 -0.1236 -0.1187 -0.0922  
 120.000 .5934 .1327 -0.1790 -0.2398 -0.3174 .0256 .2333 .3508 .2174 .0750 -0.0099 -0.0709 -0.2179  
 135.000 .7366 .2334 -0.1030 -0.1692 -0.2609 -0.2229 .2691 .4205 .1725 -0.1315 -0.0932 -0.2503 -0.2913  
 150.000 .3039 -0.0456 -0.1199 -0.2073 -0.1713 .2751 .4435 .4531 .4531 .0261 .0201 -0.0896 -0.1839  
 165.000 1.2190 1.2360 .6313 .3439 -0.0158 -0.0378 -0.1763 -0.0624 .4422 .5533 -0.1616 .0015 -0.1531 -0.1901  
 180.000 1.0800  
 270.000

K/LT .7460 .8330 .9280

PMI  
 .000 -0.0335 -0.0150 -0.0331  
 30.000 -0.0499 -0.0111 -0.0099  
 60.000 -0.0354 -0.0154 -0.0608  
 90.000 -0.0507 -0.0341  
 120.000 -0.0377 -0.0200 -0.1404  
 135.000 -0.0822 -0.0216 -0.0901  
 150.000 -0.0907 -0.0037 -0.0141  
 165.000 -0.0683 -0.0668 -0.1669  
 180.000 -0.0871 -0.0797 -0.1549

ARC11-716 1A14 01+112+512+25+AT10 EXTERNAL TANK (RB1133)

ALPHA(2) = -0.220 BETA(3) = 6.100

## SECTION 11 EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0050	.0100	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
PHI															
.000	1.2030	.8146	.4171	-.0109	-.2826	-.3340	-.3903	-.3570	-.0005	.0767	-.0435	-.2149	-.2394	-.0678	-.0194
30.000			.3999	-.0400	-.2933	-.3418	-.3931	-.3456	.0098	.0739	-.1124	-.2392	-.1756	-.0326	-.0246
60.000			.4006	-.0330	-.2936	-.3418	-.3930	.0844	-.0969	-.2756	-.4713	-.1969	-.1229	-.1636	-.0732
90.000		.8905	.4484	.0108	-.2722	-.3245	-.3750	-.0380	.4551	-.2998	-.3689	-.1059	-.1323	-.0992	
120.000			.5452	.0890	-.2110	-.2715	-.3438	.0367	.1190	.3530	.1903	.0509	-.0265	-.0995	-.2575
150.000								-.0757		.3708		-.0241		-.1502	
180.000			.6614	.1902	-.1326	-.1984	-.2875	-.2829	.2198	.3605	.1521	-.2350	-.1009	-.3003	-.3137
210.000	1.2030	1.1900	.6176	.2760	-.0646	-.1375	-.2239	-.1976	.2433	.4204	.4155	.0187	.0191	-.1138	.2039
240.000		1.1320		.3316	-.0233	-.0957	-.1832	-.0786	.2160	.4062	.5425	-.2086	-.0505	-.1611	-.2310

W/LT .7460 .8530 .9280

PHI

.000	-.0405	-.0026	-.0286
30.000	-.0595	.0136	-.0241
60.000	-.0538	.0446	.1573
90.000	-.0645	-.0020	
120.000	-.0902	.0161	.1397
150.000	-.1103	.0363	.0449
180.000	-.1140	.0178	-.0476
210.000	-.1004	.0221	.1715
240.000	-.1135	.0215	.1873

ALPHA(2) = -0.220 BETA(3) = 6.100

## SECTION 11 EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0050	.0100	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
PHI															
.000	1.1720	.7828	.3995	-.0288	-.2916	-.3432	-.4023	-.3699	-.0137	.0607	-.0325	-.2237	-.2526	-.0819	-.0287
30.000			.3665	-.0581	-.3051	-.3528	-.4028	-.3479	.0121	.0566	-.1196	-.2515	-.1812	-.0576	-.0248
60.000			.3655	-.0491	-.3038	-.3509	-.3644	-.1902	-.0935	-.2400	-.4534	-.1931	-.1031	-.1174	-.0526
90.000		.7919	.4011	-.0254	-.2929	-.3442	-.3969	-.0931	.3651	-.3233	-.3837	-.1146	-.1234	-.0882	
120.000			.4911	.0536	-.2432	-.3005	-.3691	.0105	.0617	.2957	.1945	.0199	-.0417	-.1339	-.2484
150.000								.0167		.3650		-.0565		-.1890	
180.000			.6166	.1526	-.1607	-.2237	-.3101	-.2299	.1767	.3140	.1597	-.2346	-.1425	-.3444	-.3097
210.000	1.1720	1.1490	.6081	.5314	-.0816	-.1525	-.2389	-.1981	.2010	.3596	.4050	-.0035	-.0495	-.1464	-.2510
240.000		1.1700		.3250	-.0281	-.1000	-.1661	-.0590	.2188	.3643	.5286	-.1672	-.0266	-.1645	-.2556

W/LT .7460 .8530 .9280

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OL-T12+S12M25+AT10 EXTERNAL TANK

(RB1733)

ALPHA( 2 ) = -0.220 BETA( 10 ) = 0.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000 -.0286 -.0283 -.0284  
30.000 -.0475 -.0129 -.0362  
60.000 -.0441 .0097 .1477  
90.000 -.1174 -.0637  
120.000 -.1049 -.0171 .1590  
135.000 -.1299 .0068 .0482  
150.000 -.1365 -.0160 -.0573  
165.000 -.1294 .0031 .1482  
180.000 -.1547 -.0036 .1451

ALPHA( 2 ) = -0.220 BETA( 11 ) = 10.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.1410 .7523 .3817 -.0394 -.3100 -.3643 -.4219 -.3931 -.0380 -.0191 -.1532 -.2311 -.1864 -.0849 -.0298  
30.000 .3399 -.0763 -.3269 -.3720 -.4212 -.4212 -.1827 -.0310 .0421 -.1467 -.2673 -.1400 -.0418 -.0449  
60.000 .3360 -.0848 -.3248 -.3669 -.2495 -.1130 -.0960 -.2145 -.4168 -.1713 -.0755 -.0656 -.0594  
90.000 .7443 .3613 -.0646 -.3203 -.3671 -.0941 -.1208 .2479 -.3262 -.3965 -.1374 -.0982 -.1143  
120.000 .4429 .0091 -.2784 -.3345 -.2367 -.0263 .0192 .2141 .2146 -.0129 -.0512 -.1447 -.2717  
135.000 .5711 .1175 -.1928 -.2340 -.3385 -.1231 .1271 .2667 .1080 -.3250 -.1663 -.3564 -.3333  
165.000 .2334 -.1028 -.1722 -.2383 -.2101 .1488 .2869 .4302 -.0267 -.0758 -.1918 -.2693  
180.000 1.1410 1.1020 .7949 .3152 -.0350 -.1074 -.1938 -.0488 .3202 .5019 -.1209 -.0484 -.2600 -.3130  
270.000 1.2070 .5463

X/LT .7460 .8530 .9280

PHI

.000 -.0397 -.0564 -.0004  
30.000 -.0763 -.0290 -.0309  
60.000 -.0735 -.0129 .1493  
90.000 -.1590 -.1023  
120.000 -.1226 -.0434 .1182  
135.000 -.1471 -.0173 .0169  
150.000 -.1562 -.0400 -.0856  
165.000 -.1599 -.0345 .1027  
180.000 -.2063 -.0574 .1092

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(R81733)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA(1,3) = -6.280 BETA(1,1) = -9.970

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	.8108	.4342	.0001	-.2854	-.3400	-.4007	-.3694	-.0649	.0009	-.1325	-.2509	-.1798	-.0922	-.0367
30.000			.5517	.0987	-.2096	-.2706	-.3415	-.3061	-.0821	-.2528	-.4743	-.1832	-.1503	-.1693	-.0893
60.000			.7091	.2406	-.0971	-.1621	-.2467	-.1848	.1134	-.3184	-.5571	-.3416	-.1918	.0467	-.0048
90.000		1.2340	.8568	.3767	.0105	-.0632	-.1503	.2042	.5802		-.5808	-.2172	-.2757	-.0615	-.0043
120.000			.9167	.4368	.0600	-.0180	-.1093	-.0359	.4825	.0381	.2182	.3467	.2230	.1254	-.0045
135.000								-.0320		.1784	.2898			.1152	
150.000			.8914	.4108	.0377	-.0371	-.1360	-.0823	.2862	.4461	.4208	.2306	.0218	-.0328	-.0328
165.000			.3393	.0190	-.0930	-.1801	-.1435	.1446	.4996	.5601	.2533	-.0172	-.0561	-.0737	
180.000	1.1640	1.1760	.7471	.2724	-.0660	-.1343	-.2117	-.1954	.1834	.5907	.5314	-.1620	-.0277	-.2413	-.1713
270.000		.7677							.3193						

X/LT .7460 .8330 .9280

PHI

.000	-.0651	-.0749	.0090
30.000	-.0828	-.0364	.0378
60.000	-.0373	-.0164	.0948
90.000	-.0563	-.2671	
120.000	-.0380	.0901	.7546
135.000	-.0035	.2043	.5137
150.000	-.0237	.2455	.5419
165.000	-.0509	.2343	.6330
180.000	-.0462	.1960	.4499

ALPHA(1,3) = -6.280 BETA(1,2) = -7.790

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.8414	.4501	.0100	-.2705	-.3243	-.3654	-.3499	-.0586	.0682	-.1066	-.2409	-.1782	-.1014	-.0503
30.000			.5416	.0898	-.2132	-.2741	-.3432	-.3074	-.0505	-.2136	-.3730	-.1577	-.1287	-.1960	-.0900
60.000			.6719	.2018	-.1237	-.1895	-.2728	-.2465	.1160	-.3171	-.5750	-.3285	-.2150	.0360	-.0062
90.000		1.1910	.8019	.3233	-.0319	-.1018	-.1887	-.0229	.5714		-.5538	-.2414	-.2924	-.0581	-.0310
120.000			.8713	.3893	.0212	-.0540	-.1426	-.0721	.4846	.0703	.1803	.2902	.1761	.0750	-.0551
135.000								-.0896		.2595	.2432			.0914	
150.000			.8661	.3857	.0171	-.0578	-.1551	-.1070	.2963	.4817	.3236	.2461	.0145	-.0558	-.0676
165.000			.3365	.0217	-.0939	-.1827	-.1479	.1929	.5217	.5551	.1799	-.0034	-.1080	-.1056	
180.000	1.1980	1.1850	.7635	.2858	-.0598	-.1281	-.2059	-.1893	.1672	.5062	.5580	-.2173	-.0702	-.1919	-.1118
270.000		.8209							.4226						

X/LT .7460 .8330 .9280

PHI



(RB1733)

ARC11-716 IA14 01+T12+S12M23+AT11D EXTERNAL TANK

ALPHA( 3 ) = -6.280 BETA( 2 ) = -7.990

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

.000	-.0353	-.0347	.0127
30.000	-.0776	-.0261	.0499
60.000	-.0460	.0203	.1097
90.000	-.0351	-.0245	
120.000	-.0752	.0656	.6992
135.000	-.0332	.2040	.4900
150.000	-.0423	.2361	.4599
165.000	-.0351	.2237	.6016
180.000	-.0354	.1982	.4489

ALPHA( 3 ) = -6.300 BETA( 3 ) = -6.000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.2240	.8689	.4641	.0182	-.2628	-.3166	-.3715	-.3311	-.0490	.1090	-.0598	-.2206	-.1847	-.0740	-.0280
30.000			.5348	.0788	-.2217	-.2814	-.3432	-.3061	-.0233	-.1347	-.3095	-.1713	-.1169	-.1256	-.0990
60.000			.6410	.1692	-.1499	-.2139	-.2944	-.2625	.1176	-.3126	-.5569	-.2973	-.2123	.0180	-.0092
90.000		1.1320	.7540	.2744	-.0692	-.1398	-.2211	-.1343	.5655	-.5016	-.2622	-.2912	-.0494	-.0517	
120.000			.8273	.3459	-.0143	-.0875	-.1730	-.1089	.4859	.1039	.1160	.2389	.1352	.0323	-.0962
135.000								-.1315		.3131		.2065		.0881	
150.000			.8413	.3559	-.0050	-.0783	-.1756	-.1242	.2819	.5059	.2581	.1451	-.0002	-.0640	-.1054
165.000				.3257	-.0283	-.0997	-.1876	-.1533	.2241	.5249	.5508	.1026	.0512	-.0998	-.1338
180.000	1.2240	1.1970	.7734	.2856	-.0341	-.1255	-.2034	-.1817	.1816	.4932	.5749	-.2497	-.0085	-.1881	-.1707
270.000		.8770													

X/LT .7460 .8530 .9280

PHI

.000	-.0406	-.0181	.0204
30.000	-.0631	-.0364	.0589
60.000	-.0458	.0288	.1156
90.000	-.0667	.0348	
120.000	-.1072	.0431	.6759
135.000	-.0672	.1885	.4625
150.000	-.0652	.2159	.4253
165.000	-.0649	.2023	.5512
180.000	-.0458	.1823	.4035

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ARC11-716 IAI4 CR+T12+S12M29+AT10 EXTERNAL TANK (RB1733)

ALPHA( 3 ) = -6.260 BETA( 4 ) = -3.980

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2460	.8659	.4778	.0247	-.2545	-.3067	-.3649	-.3280	.0063	.1294	-.0286	-.2019	-.5026	-.0995	.0019
30.000			.5239	.0639	-.2275	-.2832	-.3475	-.3022	-.0046	-.0396	-.2421	-.2116	-.1093	-.1133	-.0753
60.000			.6076	.1402	-.1733	-.2338	-.3098	-.2721	.1245	-.3062	-.5320	-.2703	-.2333	-.0121	-.0025
90.000		1.1140	.7080	.2279	-.1038	-.1697	-.2502	-.1592	.5603	-.4979	-.2857	-.2684	-.0461	-.0599	
120.000			.7852	.3030	-.0484	-.1191	-.2027	-.1748	.4748	.1361	.0825	.1915	.0984	.0224	-.1315
135.000								-.1553		.3471		.1469		.0240	
150.000			.8196	.3287	-.0254	-.0967	-.1933	-.1418	.2885	.4899	.2149	.0468	-.0118	-.0925	-.1474
165.000				.3184	-.0338	-.1046	-.1938	-.1582	.2489	.4907	.5230	.0312	.0154	-.1155	-.1419
180.000	1.2460	1.2020	.7834	.2928	-.0492	-.1202	-.2001	-.1681	.1786	.4609	.5829	-.1958	-.0307	-.0892	-.1871
270.000		.9235							.5656						

X/LT .7460 .8530 .9280

PHI

.000	-.0338	-.0207	-.0040
30.000	-.0515	-.0268	.0516
60.000	-.0440	.0255	.1214
90.000	-.0847	.0777	
120.000	-.1296	.0470	.5840
135.000	-.0868	.1614	.4143
150.000	-.0833	.1905	.3727
165.000	-.0687	.2015	.4710
180.000	-.0464	.1630	.3930

ALPHA( 3 ) = -6.160 BETA( 5 ) = .030

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	.8977	.4833	.0337	-.2461	-.2979	-.3551	-.3185	-.0241	.1352	-.0020	-.1884	-.3288	-.0480	.0226
30.000			.4975	.0471	-.2431	-.2949	-.3510	-.3077	.0130	.0335	-.1502	-.2482	-.1457	-.0635	-.0265
60.000			.5410	.0818	-.2188	-.2745	-.3426	-.2868	.1905	-.2703	-.4993	-.1921	-.1463	-.1890	-.0152
90.000		1.0230	.6103	.1465	-.1739	-.2336	-.3111	.0219	.5677	-.4590	-.3294	-.1954	-.1954	-.0844	-.0779
120.000			.6894	.2124	-.1170	-.1828	-.2522	-.2339	.2565	.2276	.0436	.1072	.0234	-.0090	-.1833
135.000								-.2100		.3674		.0527		-.0434	
150.000			.7531	.2639	-.0759	-.1412	-.2365	-.1897	.2780	.4272	.1836	-.0713	-.0409	-.1744	-.2247
165.000				.2904	-.0547	-.1249	-.2128	-.1756	.2781	.4875	.4710	-.0391	-.0103	-.1139	-.1681
180.000	1.2610	1.1980	.7877	.2963	-.0301	-.1198	-.2065	-.1507	.1777	.4490	.5608	-.1381	.0475	-.0854	-.1376
270.000		1.0200							.5590						

X/LT .7460 .8530 .9280

PHI



(RB1733)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

$$\text{ALPHA}(3) = -6.130 \quad \text{BETA}(5) = .030$$

DEPENDENT VARIABLE CP

### SECTION (1) EXTERNAL TANK

X/LY	.7460	.0530	.9200
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PM1					
.000	-.0137	-.0096	-.0092		
30.000	-.0431	-.0137	.0215		
60.000	-.0325	.0340	.1370		
90.000	-.0739	.0798			
120.000	-.0609	.0345	.3243		
135.000	-.0546	.1102	.1932		
150.000	-.0666	.1706	.1848		
165.000	-.0548	.1245	.2643		
180.000	-.0440	.1315	.2559		

$$\text{ALPHA}(3) = -6.320 \quad \text{BETA}(6) = 2.300$$

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
.000	1.2570	.6964	.4826	.0330	-.2519	-.3036	-.3594	-.3238	-.0332	.1292	-.0100	-.1928	-.2287	-.0499	.0192
30.000		.4798	.0294	-.2560	-.3077	-.3630	-.3155	.0092	.0664	-.1205	-.2539	-.1993	-.1993	-.0493	-.0084
60.000		.5247	.0478	-.2416	-.2944	-.3556	-.3022	.1509	-.2560	-.4928	-.1739	-.1102	-.1102	-.1509	-.0355
90.000	.9781	.5639	.1051	-.2071	-.2642	-.3381	.0290	.5776	.5776	-.3485	-.3590	-.1183	-.1061	-.0826	
120.000		.6419	.1745	-.1528	-.2153	-.2910	.2414	.2583	.2752	.1951	.0750	-.0028	-.0350	-.2003	
150.000							-.2247		.3959		.0249		-.0891		
180.000			.7210	.2373	-.1019	-.1657	-.2541	-.2138	.3289	.4881	.1382	-.1114	-.0632	-.1984	-.2531
210.000			.2788	-.0650	-.1378	-.2231	-.1826	.2082	.4906	.4462	-.0199	-.0095	-.0742	-.1613	
240.000	1.2570	1.2000	.7897	.2991	-.0552	-.1214	-.2082	-.1409	.1830	.4321	.5305	-.1120	.0139	-.0975	-.1833
270.000		1.0650						.5566							

X/LT	.7460	.8530	.9280
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PMI	.0000	-.0213	-.0164	-.0103
30,000	.0000	-.0421	-.0355	.0080
60,000	.0000	-.0272	.0289	.1364
90,000	.0000	-.0364	.0711	
120,000	.0000	-.0244	.0539	.2377
135,000	.0000	-.0544	.0784	.1179
150,000	.0000	-.0586	.0711	.0785
165,000	.0000	-.0516	.1025	.2735
180,000	.0000	-.0680	.1296	.2221

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DATE 06 JAN 75

TABULATED PRESSURE DATA - IA144 - VOL. 9

PAGE 404

(RB1733)

ARC11-716 IA14 CR+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 3 ) = -6.330 BETA( 7 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2430	.8843	.4738	.0245	-.2534	-.3079	-.3659	-.3319	-.0222	.1165	-.0244	-.2003	-.2203	-.0835	.0040
30.000			.4591	.0066	-.2646	-.3186	-.3693	-.3282	.0248	.0806	-.1000	-.2675	-.1762	-.0317	-.0007
60.000			.4648	.0156	-.2600	-.3120	-.3634	-.3071	.1288	-.2291	-.4643	-.1641	-.0958	-.1470	-.0628
90.000		.9255	.5107	.0566	-.2362	-.2923	-.3603	.0035	.5831		-.3171	-.3662	-.1176	-.1376	-.0822
120.000			.5866	.1279	-.1869	-.2477	-.3191	-.1148	.1592	.3193	.2149	.0466	-.0257	-.0675	-.2124
135.000								-.2631		.2541		-.0134		-.1211	
150.000			.6784	.1974	-.1275	-.1897	-.2816	-.2422	.2281	.3645	.1292	-.1846	-.1008	-.2488	-.2909
165.000				.2566	-.0797	-.1523	-.2370	-.2814	.2502	.3884	.4201	-.0022	-.0077	-.0827	-.1855
180.000	1.2430	1.1980	.7806	.2970	-.0541	-.1244	-.2109	-.1322	.1809	.3931	.5159	-.1822	-.0087	-.1549	-.1839
270.000		1.1110							.5533						

X/LT .7480 .8530 .9280

PMI

.000	-.0406	-.0244	-.0059												
30.000	-.0421	-.0058	.0015												
60.000	-.0385	.0265	.1362												
90.000	-.0416	.0557													
120.000	-.0484	.0390	.1536												
135.000	-.0699	.0431	.0658												
150.000	-.0768	.0249	.0025												
165.000	-.0600	.0765	.1812												
180.000	-.0842	.1028	.1711												

ALPHA( 3 ) = -6.380 BETA( 8 ) = 6.050

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2240	.8646	.4607	.0159	-.2620	-.3171	-.3748	-.3458	-.0163	.0978	-.0375	-.2187	-.2033	-.0835	-.0249
30.000			.4283	-.0098	-.2925	-.3325	-.3845	-.3450	.0417	.0625	-.1003	-.2749	-.1841	-.0541	-.0134
60.000			.4273	-.0111	-.2823	-.3297	-.3685	-.2436	.0854	-.1935	-.4337	-.1757	-.0930	-.1232	-.0837
90.000		.8713	.4610	.0201	-.2648	-.3174	-.3791	-.0535	.5258		-.3169	-.3866	-.1016	-.1496	-.0918
120.000			.5352	.0880	-.2187	-.2797	-.3460	.0240	.0937	.3274	.1659	.0175	-.0473	-.1020	-.2320
135.000								-.0780		.2627		-.0328		-.1507	
150.000			.6306	.1638	-.1559	-.2192	-.3069	-.2683	.2017	.3267	.1108	-.2756	-.1140	-.3010	-.2990
165.000				.2329	-.0998	-.1705	-.2537	-.2178	.2191	.3843	.3848	-.0103	-.0074	-.1149	-.2012
180.000	1.2240	1.1560	.7684	.2819	-.0626	-.1326	-.2173	-.1130	.1947	.3674	.5028	-.2248	-.0620	-.1721	-.2291
270.000		1.1550							.5597						

X/LT .7480 .8530 .9280

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14A - VOL. 9

APL11-716 IAI14 01+712+512M25+AT10 EXTERNAL TANK (RB1133)

ALPHA( 3 ) = -6.360 BETA( 8 ) = 5.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT	.7460	.8330	.9280
PHI			
.000	-.0442	-.0110	.0129
30.000	-.0429	.0205	-.0035
60.000	-.0376	.0372	.1435
90.000	-.0707	.0268	
120.000	-.0764	.0314	.1696
135.000	-.0976	.0299	.0677
150.000	-.1018	.0109	-.0291
165.000	-.0921	.0487	.1761
180.000	-.1032	.0471	.2079

ALPHA( 3 ) = -6.270 BETA( 9 ) = 8.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1970	.8326	.4427	.0043	-.2689	-.3216	-.3834	-.3599	-.0251	.0753	-.0758	-.2299	-.2034	-.1003	-.0499
30.000			.3968	-.0326	-.2932	-.3405	-.3908	-.3578	.0355	.0761	-.1070	-.2664	-.1816	-.0632	-.0163
60.000			.3680	-.0394	-.2976	-.3407	-.3990	-.1905	.0571	-.1659	-.3994	-.1847	-.0942	-.0895	-.0627
90.000		.6167	.4178	-.0167	-.2886	-.3359	-.3867	-.0695	.4575	-.3226	-.4030	-.0947	-.1333	-.1333	-.0867
120.000			.4618	.0481	-.2490	-.3057	-.3742	.0020	.0412	.2970	.1390	-.0117	-.0622	-.1393	-.2440
135.000			.5917	.1284	-.1823	-.2439	-.3314	.0049	.2856	.2900	-.0820	-.0820	-.1467	-.3453	-.2906
150.000				.2094	-.1181	-.1843	-.2705	-.2335	.1789	.3296	.3619	-.0324	-.0695	-.1490	-.2493
165.000			.7575	.2757	-.0715	-.1385	-.2243	-.0998	.1916	.3194	.4873	-.1892	-.0079	-.1930	-.2374
180.000									.5593						

V/LT	.7460	.8330	.9280
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PHI			
.000	-.0311	-.0460	.0060
30.000	-.0275	-.0078	-.0079
60.000	-.0523	.0058	.1459
90.000	-.1140	-.0361	
120.000	-.0965	-.0028	.1973
135.000	-.1174	.0282	.0732
150.000	-.1200	.0084	-.0351
165.000	-.1200	.0284	.1673
180.000	-.1439	.0270	.1746

ORIGIN: 11-716 IAI14  
OF: 11-716 IAI14

(RB1733)

ARC11-716 1A14 01-112-512N25-AT10 EXTERNAL TANK

ALPHA( 3 ) = -6.260 BETA( 10 ) = 10.092

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1680	.6029	.4263	-.0022	-.2797	-.3350	-.3951	-.3736	-.0336	.0090	-.1272	-.2414	-.1808	-.0943	-.0353
30.000			.3708	-.0352	-.3089	-.3570	-.4081	-.3682	-.0090	.0369	-.1445	-.2790	-.1670	-.0423	-.0277
60.000			.3599	-.0641	-.3127	-.3529	-.4128	-.1117	-.0340	-.1402	-.3693	-.1697	-.0389	-.0426	-.0661
90.000		.7702	.3772	-.0464	-.3139	-.3563	-.1494	-.0961	.3475	-.3426	-.4180	-.0691	-.0691	-.0761	-.1100
120.000			.4417	.0094	-.2782	-.3319	-.3480	-.0329	-.0039	.2208	.1307	-.0394	-.0646	-.1445	-.2616
150.000								-.0093		.3100	-.1126			-.2163	
180.000			.5503	.0944	-.2096	-.2595	-.3532	-.0662	.1332	.2449	.0900	-.3603	-.1743	-.3571	-.3447
210.000			.1903	-.1345	-.2508	-.2960	-.2442	.1308	.2700	.3812	-.0546	-.0667	-.2061	-.2671	
240.000	1.1680	1.0620	.7472	.2651	-.0739	-.1432	-.2280	-.0865	.1360	.2622	.4636	-.1328	-.0460	-.2707	-.3141
		1.2320													

X/LT .7480 .8530 .9280

PHI

.000	-.0626	-.0768	.0004												
30.000	-.0347	-.0210	-.0034												
60.000	-.0725	-.0120	.1514												
90.000	-.1608	-.0736													
120.000	-.1065	-.0228	.1561												
150.000	-.1357	.0137	.0491												
180.000	-.1426	-.0353	-.0606												
210.000	-.1475	-.0015	.1334												
240.000	-.1950	-.0276	.1459												

ALPHA( 4 ) = -4.200 BETA( 1 ) = -9.980

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1860	.6651	.4840	.0407	-.2584	-.3155	-.3773	-.3542	-.1405	.0348	-.1236	-.2221	-.1925	-.1250	-.0461
30.000			.6074	.1441	-.1741	-.2386	-.3126	-.2739	-.0126	-.1974	-.4588	-.1520	-.1346	-.1442	-.0836
60.000			.7521	.2750	-.0711	-.1389	-.2273	-.1823	.1866	-.2530	-.4517	-.3011	-.1920	.0364	.0194
90.000		1.2520	.6657	.3794	.0122	-.0632	-.1508	.1319	.5017	-.5532	-.2267	-.2771	-.0319	-.0046	
120.000			.8904	.4050	.0335	-.0442	-.1330	-.0645	.4334	-.0172	-.0480	.3411	.2320	.1108	-.0059
150.000								-.0694		.0322	.2648			.1100	
180.000			.8419	.3589	-.0069	-.0778	-.1738	-.1209	.2374	.3395	.3617	.1905	.0266	-.0309	-.0325
210.000			.2887	-.0643	-.1373	-.2199	-.1844	.0903	.4612	.5199	.2347	-.0111	-.0944	-.0679	
240.000	1.1860	1.1340	.6939	.2187	-.1102	-.1767	-.2514	-.2284	.1554	.4747	.5088	-.1770	-.0164	-.2330	-.1733
		.7887													

X/LT .7480 .8530 .9280

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4871

(N81735)

ARC11-7.6 IAI4 01+T12+S12N25A\*\*10 EXTERNAL TANK

ALPHA( 4 ) = -4.800 BETA( 1 ) = -9.980

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8550 .9280

PHI	.000	-.0368	-.0781	.0012
30.000	-.0589	-.0371	.3166	
60.000	-.0145	.0856	.1306	
90.000	-.0463	-.1026		
120.000	-.0455	.0619	.7808	
150.000	-.0086	.2372	.5257	
180.000	-.0100	.2748	.5767	
210.000	-.0206	.2690	.6191	
240.000	-.0121	.2222	.4463	

ALPHA( 4 ) = -4.230 BETA( 2 ) = -7.990

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6390	
PHI	.000	1.2210	.8974	.9009	.0515	-.2361	-.2907	-.3315	-.3318	-.1502	.0944	-.0737	-.2176	-.1920	-.1390	-.0327
30.000				.5977	.1330	-.1727	-.2353	-.3041	-.2769	.0130	-.1520	-.3562	-.1337	-.1238	-.1230	-.1084
60.000				.7166	.2354	-.0920	-.1562	-.2500	-.2032	.1942	-.2379	-.5029	-.2596	-.1819	.0212	.0070
90.000		1.2140	.8145	.3298	.3298	-.0211	-.0917	-.1842	-.0963	.368	-.5422	-.2437	-.2863	-.0564	-.0392	
120.000			.8463	.3622	.0034	-.0034	-.0688	-.1616	-.0955	.4365	.0036	-.1023	.2755	.1846	.0801	-.0348
150.000				.8219	.3351	-.0178	-.0581	-.1877	-.1399	.2482	.4207	.2842	.2128	.0146	-.0569	-.0844
180.000				.2891	-.0580	-.0580	-.1299	-.2186	-.1837	.1177	.4839	.5207	.1630	-.0133	-.1174	-.1001
210.000	1.2210	1.1430	.7098	.2337	-.0928	-.1590	-.2391	-.2222	.1104	.4774	.5430	-.2307	-.0253	-.1924	-.1097	
240.000		.8435							.5614							

X/LT .7480 .8550 .9280

PHI	.000	-.0371	-.0316	.0167
30.000	-.0707	-.0119	.0471	
60.000	-.0368	.0788	.1324	
90.000	-.0820	.0667		
120.000	-.0829	.0963	.7004	
150.000	-.0416	.2334	.5028	
180.000	-.0332	.2677	.4949	
210.000	-.0374	.2577	.6109	
240.000	-.0280	.2276	.4529	

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ARC11-716 1A14 36+712+512M25+AT10 EXTERNAL TANK (R81733)

ALPHA( 4) = -4.180 BETA( 3) = -5.970

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2470	.9280	.5186	.0615	-.2288	-.2943	-.3460	-.3165	-.1263	.1415	-.0438	-.2016	-.1930	-.0388	-.0139	
30.000			.5910	.1252	-.1837	-.2429	-.3125	-.2813	.0308	-.0859	-.2969	-.1546	-.1023	-.1181	-.0965	
60.000			.6837	.2047	-.1194	-.1926	-.2739	-.2257	.1943	-.2383	-.4951	-.2295	-.2098	.0012	-.0030	
90.000		1.1750	.7576	.2824	-.0595	-.1292	-.2193	-.1490	.5900		-.5392	-.2633	-.2725	-.0434	-.0516	
120.000			.8076	.3185	-.0313	-.1019	-.1927	-.1276	.4394	.0339	-.1085	-.2246	.1396	.0801	-.0965	
135.000							-.1472		.2298		.1636			.0688		
150.000			.7982	.3079	-.0393	-.1191	-.2107	-.1543	.2530	.4504	.2271	.1446	-.0129	-.0670	-.0970	
165.000				.2748	-.0672	-.1338	-.2260	-.1908	.1794	.4918	.5173	.1033	-.0057	-.1100	-.1246	
180.000	1.2470	1.1320	.7231	.2377	-.0923	-.1597	-.2392	-.2120	.1420	.4499	.5632	-.2634	.0474	-.1995	-.1576	
270.000		.9039							.6025							

K/LT 7480 .8530 .9280

PMI

.000	-.0410	-.0086	.0200
30.000	-.0540	-.0195	.0571
60.000	-.0330	.0677	.1215
90.000	-.0635	.0939	
120.000	-.1584	.0601	.6634
135.000	-.0667	.2102	.4761
150.000	-.0445	.2415	.4574
165.000	-.0374	.2351	.5723
180.000	-.0131	.2123	.4266

ALPHA( 4) = -4.170 BETA( 4) = -3.890

SECTION ( 1) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2710	.9398	.5268	.0699	-.2246	-.2769	-.3423	-.3145	-.0728	.1558	-.0151	-.1908	-.2148	-.0847	.0101	
30.000			.5772	.1104	-.1931	-.2537	-.3190	-.2855	.0338	.0138	-.2463	-.2142	-.1089	-.1052	-.0550	
60.000			.6454	.1709	-.1477	-.2078	-.2939	-.2429	.2009	-.2275	-.4803	-.2105	-.2092	-.0495	-.0009	
90.000		1.1340	.7188	.2320	-.0986	-.1642	-.2482	-.1838	.5855		-.5156	-.2865	-.2385	-.0457	-.0611	
120.000			.7622	.2722	-.0651	-.1330	-.2226	-.1618	.4404	.0654	-.1185	-.1644	.0919	.0407	-.1280	
135.000						-.1830			.2679		.1101			.0404		
150.000			.7740	.2770	-.0594	-.1273	-.2268	-.1745	.2358	.4657	.1898	.0428	-.0111	-.0884	-.1369	
165.000			.2650	-.0757	-.1412	-.2318	-.1959	.2076	.4454	.5073	.0170	.0315	-.1213	-.1287		
180.000	1.2710	1.1350	.7290	.2357	-.0891	-.1582	-.2392	-.2022	.1443	.3970	.5509	-.2236	-.0090	-.0701	-.1862	
270.000		.9459							.6022							

K/LT 7480 .8530 .9280

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81733)

ARC11-716 1A14 D+T12-S12N23+T110 EXTERNAL TANK

ALPHA ( 4 ) = -4.1170 BETA ( 4 ) = -3.990

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.7400	.8530	.9200
PMI			
.000	-.0309	-.0215	-.0064
30.000	-.0329	-.0145	.0408
60.000	-.0306	.0004	.1011
90.000	-.0762	.1008	
120.000	-.1271	.0477	.6231
135.000	-.0836	.1838	.4333
150.000	-.0656	.2137	.4003
165.000	-.0483	.2224	.4833
180.000	-.0273	.1896	.3910

ALPHA ( 4 ) = -4.1190 BETA ( 5 ) = -2.0280

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PMI															
.000	1.2830	.5330	.5332	.0738	-.2214	-.2749	-.3392	-.3051	-.1096	.1644	.0069	-.1796	-.2390	-.0688	.0238
30.000			.5636	.0982	-.2040	-.2619	-.3268	-.2861	.0272	.0554	-.1988	-.2307	-.1159	-.0845	-.0299
60.000			.6128	.1440	-.1729	-.2323	-.3096	-.2802	.2104	-.2150	-.4526	-.1798	-.1231	-.1140	-.0033
90.000		1.0910	.6723	.1969	-.1324	-.1932	-.2731	-.2134	.5869		-.5142	-.3000	-.1915	-.0309	-.0632
120.000			.7181	.2374	-.0971	-.1646	-.2446	-.2179	.4156	.1026	-.0961	.1398	.0462	.0227	-.1900
135.000							-.2029	-.1899		.3110		.0478		.0090	
150.000			.7473	.2529	-.0808	-.1480	-.2391	-.1899	.2415	.4311	.1480	-.0211	-.0354	-.1190	-.1717
165.000				.2527	-.0829	-.1477	-.2340	-.2000	.2278	.4174	.4680	-.0103	-.0093	-.1169	-.1354
180.000	1.2830	1.1990	.7354	.2444	-.0875	-.1568	-.2362	-.1976	.1768	.3950	.3227	-.1905	-.0282	-.0795	-.1288
270.000		.9959							.5946						

M/LT .7400 .8530 .9200

PMI			
.000	-.0140	-.0114	-.0080
30.000	-.0426	-.0141	.0368
60.000	-.0220	.0483	.1080
90.000	-.0811	.0950	
120.000	-.1164	.0514	.4676
135.000	-.0779	.1521	.3211
150.000	-.0425	.1701	.2870
165.000	-.0311	.1791	.4911
180.000	-.0399	.1471	.4068

ARC11-715 IAL4 21\*12+512+25+AT10 EXTERNAL TANK

(RB1733)

ALPHA01 (4) = -4.000 BETA0 (6) = -.010

## SECTION 11 EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2850	.9542	.5332	.0766	-.2120	-.2682	-.3303	-.3027	-.1124	.1650	.0125	-.1755	-.2448	-.0618	.0268
30.000		.5434	.0834	-.0834	-.2095	-.2672	-.3277	-.2943	.0164	.0941	-.1480	-.2264	-.1292	-.0754	-.0124
60.000			.5747	.1092	-.1919	-.2476	-.3246	-.2797	.2070	.1952	-.4295	-.1494	-.0815	-.1409	-.0272
90.000		1.0440	.6236	.1568	-.1805	-.2216	-.3006	-.2285	.5880		-.4932	-.3201	-.1433	-.0622	-.0704
120.000			.6750	.2001	-.1244	-.1881	-.2713	-.2446	.2921	.1401	-.0754	.1037	.0005	.0101	-.1578
150.000								-.2256		.3433		.0085		-.0299	
180.000			.7151	.2270	-.1000	-.1628	-.2578	-.2111	.2443	.3637	.1775	-.0927	-.0517	-.1496	-.2099
210.000				.2497	-.0879	-.1525	-.2425	-.2087	.2508	.4065	.4275	-.0205	-.0176	-.1016	-.1551
240.000	1.2850	1.1580	.7561	.2499	-.0945	-.1512	-.2386	-.1839	.1555	.3745	.5142	-.1454	.0146	-.0783	-.1337
270.000		1.0450							.5795						

K/LT .7480 .6530 .9280

PMI

.000	-.0100	-.0066	.0069												
30.000	-.0350	-.0093	.0160												
60.000	-.0171	.0376	.1163												
90.000	-.0518	.0859													
120.000	-.0367	.0553	.3252												
150.000	-.0312	.1319	.2119												
180.000	-.0470	.1255	.1971												
210.000	-.0308	.1469	.2758												
240.000	-.0212	.1514	.2542												

ALPHA01 (4) = -4.210 BETA0 (7) = 2.110

## SECTION 11 EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2800	.9532	.5349	.0741	-.2230	-.2792	-.3393	-.3059	-.1045	.1510	.0004	-.1795	-.2366	-.0674	.0215
30.000		.5285	.0663	-.2274	-.2841	-.3445	-.3039	.0318	.0318	.31	-.1241	-.2294	-.1538	-.0701	.0062
60.000		.5385	.0780	-.2225	-.2781	-.3374	-.2990	.2021	.2021	.50	-.4021	-.1301	-.0631	-.1197	-.0615
90.000		1.0000	.5765	.1126	-.1988	-.2584	-.3295	-.2646	.5915		-.4964	-.3401	-.1184	-.0995	-.0796
120.000			.6296	.1623	-.1614	-.2253	-.3011	-.2723	.1754	.2016	-.0575	.0714	-.0290	-.0214	-.1797
150.000								-.2524		.3184		-.0180		-.0716	
180.000		.6852	.2013	-.1281	-.1913	-.2802	-.2387	.2367	.3899	.1085	-.1466	-.0583	-.1803	-.2381	
210.000			.2376	-.1023	-.1707	-.2555	-.2217	.2372	.4073	.4032	-.0338	-.0175	-.0713	-.1420	
240.000	1.2800	1.1550	.7552	.2462	-.0916	-.1590	-.2426	-.1746	.1705	.3806	.4917	-.1384	.0157	-.0881	-.1661
270.000		1.0880							.5811						

K/LT .7480 .6530 .9280

PMI



DATE 8 JAN 75 TANKATED PRESSURE DATA - JALAN - VOL. 9

(RB1733)

ARC11-16 JALAN C1-T12-S1245+AT10 EXTERNAL TANK

ALPHA( 4 ) = -4.210 BETA( 7 ) = 2.110

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7400 .8530 .9280

PHI  
 .000 -0.0166 -0.0160 -0.0026  
 30.000 -0.0272 -0.0074 .0155  
 60.000 -0.0162 -0.0367 .1106  
 90.000 -0.0195 -0.0828 .2459  
 120.000 -0.0121 -0.0622 .2459  
 150.000 -0.0300 -0.0997 .1555  
 180.000 -0.0378 -0.0923 .0957  
 210.000 -0.0384 -0.1230 .2716  
 240.000 -0.0433 -0.1464 .2271

ALPHA( 4 ) = -4.200 BETA( 9 ) = 4.090

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .6300  
 PHI  
 .000 1.2690 .9367 .5232 .0680 -0.2294 -0.2843 -0.3904 -0.3164 -0.0697 .1376 -0.0056 -0.1812 -0.2230 -0.0917 .0067  
 30.000 .0439 -0.2401 -0.3004 -0.3577 -0.3230 .0497 .1063 -0.1027 -0.2412 -0.1755 -0.0619 .0041 .0041  
 60.000 .0432 -0.2409 -0.2991 -0.3564 -0.3106 .2261 .1559 -0.3901 -0.1096 -0.0667 -0.0645 -0.0747  
 90.000 .0644 -0.2501 -0.2856 -0.3548 .0023 .6075 .4895 -0.4895 -0.3645 -0.1107 -0.1371 -0.0808  
 120.000 .1163 -0.1984 -0.2573 -0.3270 -0.0658 .1260 .2548 -0.0066 .0323 -0.0496 -0.0514 -0.1945  
 150.000 .1693 -0.1560 -0.2148 -0.3034 -0.2605 .1919 .3215 .1070 -0.2267 -0.0877 -0.2228 -0.2743  
 180.000 .2102 -0.1175 -0.1867 -0.2790 -0.2351 .2169 .3416 .3919 -0.0306 -0.0488 -0.0614 -0.1769  
 210.000 .2432 -0.0966 -0.1533 -0.2471 -0.1673 .1595 .5527 .4649 -0.2060 -0.0176 -0.1921 -0.1682  
 240.000 1.1290 .7294 .1290 .5841

K/LT .7400 .8530 .9280

PHI  
 .000 -0.0342 -0.0313 -0.0021  
 30.000 -0.0246 -0.0076 .0127  
 60.000 -0.0455 .0221 .1024  
 90.000 -0.0223 .0724 .1707  
 120.000 -0.0286 .0615 .1707  
 150.000 -0.0520 .0695 .0697  
 180.000 -0.0574 .0467 .0252  
 210.000 -0.0436 .0993 .1982  
 240.000 -0.0646 .1231 .1871

ON 10 JAN 75

ARC11-716 IA14A 01+12+S12N25+A710 EXTERNAL TANK (R81733)

ALPHA( 4) = -4.210 BETAO ( 9) = 6.060

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0400	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI														
.000	1.2440	.9202	.5106	.0556	-.2313	-.2917	-.3545	-.3236	-.0873	.1217	-.0177	-.1944	-.2108	-.1218
30.000			.4664	.0186	-.2606	-.3150	-.3690	-.3349	.0642	.1209	-.1095	-.2615	-.1837	-.0678
60.000			.4545	.0072	-.2650	-.3161	-.3841	-.2826	.1756	-.1191	-.3390	-.1163	-.0771	-.0678
90.000		.8931	.4729	.0254	-.2554	-.3106	-.3770	-.0091	.5656	-.4415	-.3867	-.1155	-.1687	-.0874
120.000			.5232	.0770	-.2261	-.2867	-.3526	.0099	.0657	.2952	.1333	-.0084	-.0708	-.0933
135.000							-.0847			.1362	-.0793		-.1400	
150.000			.5982	.1335	-.1807	-.2385	-.3246	-.2800	.1707	.3023	.0778	-.3080	-.1230	-.2880
165.000			.1885	-.1342	-.2009	-.2829	-.2501	.1889	.3394	.3465	-.0393	-.0534	-.1039	-.1957
180.000	1.2440	1.1150	.7142	.2268	-.1026	-.1687	-.2522	-.1553	.1710	.3173	.4668	-.2317	-.0537	-.1710
270.000		1.1790						.5908						-.2182

X/LT .7460 .8530 .9280

PMI														
.000	-.0460	-.0238	.0191											
30.000	-.0288	.0255	.0149											
60.000	-.0567	.0353	.0100											
90.000	-.0490	.0664												
120.000	-.0638	.0551	.1948											
135.000	-.0795	.0564	.0849											
150.000	-.0802	.0329	-.0126											
165.000	-.0719	.0712	.2054											
180.000	-.0841	.0691	.2376											

ALPHA( 4) = -4.200 BETAO (10) = 8.080

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.2180	.8672	.4909	.0463	-.2446	-.2998	-.3636	-.3319	-.1034	.0835	-.0541	-.2077	-.2011	-.1324	-.0547
30.000			.4326	-.0073	-.2731	-.3267	-.3811	-.3433	.0433	.1213	-.0948	-.2735	-.1918	-.0813	.0006
60.000			.4148	-.0247	-.2819	-.3293	-.3942	-.2045	.1233	-.0916	-.3400	-.1292	-.0928	-.0825	-.0821
90.000		.8394	.4284	-.0105	-.2770	-.3304	-.3929	-.0358	.5076	-.4035	-.4049	-.1138	-.1806	-.0714	
120.000			.1778	.0364	-.2526	-.3070	-.3729	-.0083	.0180	.2904	.1111	-.0428	-.0904	-.1339	-.2192
135.000							-.0097			.1366	-.1098		-.1750		
150.000			.5803	.0999	-.2031	-.2614	-.3441	-.1841	.1458	.2746	.0961	-.3469	-.1519	-.3315	-.2593
165.000			.1706	-.1507	-.2168	-.2968	-.2628	.1500	.3001	.3193	-.0398	-.0949	-.1511	-.2248	
180.000	1.2180	1.0570	.7042	.2222	-.1095	-.1774	-.2580	-.1379	.1597	.2862	.4437	-.1984	-.0095	-.1972	-.2502
270.000		1.2120							.5956						

X/LT .7460 .8530 .9280

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+Y12+S12N23+AT10 EXTERNAL TANK (R81T33)

ALPHA( 4) = -4.200 BETA( 10) = 8.080

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9290

PHI	.000	.0272	.0448	.0600
30.000	-.0155	-.0063	.0072	.1134
60.000	-.0396	.0041	.1134	
90.000	-.0820	.0152	.2383	
120.000	-.0742	.0234	.1002	
150.000	-.0937	.0595	.0159	
180.000	-.0932	.0432	.1916	
210.000	-.0990	.0548	.2016	
240.000	-.1245	.0487		

ALPHA( 4) = -4.180 BETA( 11) = 10.090

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI	.000	1.1830	.8540	.4725	.0345	-.2525	-.3100	-.3758	-.3524	-.1148	.0190	-.0997	-.2193	-.1964	-.1273	-.0475
30.000				.3995	-.0319	-.2958	-.3440	-.3997	-.3642	.0167	.0676	-.1244	-.3004	-.1831	-.0496	-.0086
60.000				.3801	-.0496	-.3030	-.3479	-.4077	-.0961	.0225	-.0681	-.3026	-.1326	-.0571	-.0201	-.0272
90.000		.7873		.3666	-.0406	-.3023	-.3515	-.3342	-.0734	.4521	-.4239	-.4227	-.0539	-.0563	-.0936	
120.000				.4352	.0009	-.2813	-.3354	-.3969	-.0418	-.0273	.2400	.0687	-.0730	-.0930	-.1465	-.2450
150.000				.5199	.0686	-.2318	-.2890	-.3690	-.0624	.1189	.2408	.0774	-.3865	-.1837	-.3506	-.3199
180.000				.1513	-.1701	-.2331	-.3136	-.2783	.1141	.2513	.3306	.3306	-.0810	-.0651	-.2130	-.2516
210.000		1.1830	1.0120	.6923	.2135	-.1159	-.1828	-.2627	-.1230	.1026	.2471	.4013	-.1557	-.0571	-.2760	-.3030
240.000			1.2490							.6310						

X/LT .7460 .8530 .9290

PHI	.000	-.0592	-.0867	-.0035
30.000		-.0412	-.0243	.0046
60.000		-.0629	-.0118	.1286
90.000		-.1296	-.0211	
120.000		-.0904	.0020	.1936
150.000		-.1137	.0450	.0769
180.000		-.1168	.0299	-.0379
210.000		-.1260	.0204	.1665
240.000		-.1690	.0072	.1797

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ARC11-716 IA14 OL+T12+S12N23+AT10 EXTERNAL TANK (R81733)

ALPHA( 5) = -2.870 BETA( 1) = -10.040

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1960	.8966	.5162	.0661	-.2328	-.2917	-.3579	-.3355	-.1586	.0575	-.1001	-.1997	-.1877	-.1726	-.0510
30.000			.6420	.1722	-.1458	-.2128	-.2875	-.2526	.0230	-.1589	-.4331	-.1260	-.1287	-.1348	-.0998
60.000			.7789	.2965	-.0505	-.1175	-.2109	-.1599	.2361	-.2110	-.4310	-.2551	-.1715	.0215	.0278
90.000		1.2610	.8703	.3848	.0176	-.0575	-.1472	.0444	.6154	-.0445	-.5243	-.2817	-.2631	-.0470	-.0015
120.000			.8711	.3882	.0205	-.0555	-.1427	.0757	.4076	-.0445	-.1118	.3075	-.2538	.1263	-.0007
135.000							-.1113		-.0073		.2258		.1221		
150.000			.8110	.3288	-.0272	-.0980	-.1916	-.1433	.2051	.1841	.3141	.1513	.0431	-.0179	-.0293
165.000				.2559	-.0884	-.1559	-.2404	-.2054	.0535	.4346	.4928	.2240	.0012	-.0881	-.0629
180.000	1.1960	1.1030	.6612	.1891	-.1315	-.1941	-.2679	-.2457	.1151	.4570	.4970	-.1819	.0141	-.2553	-.1578
270.000		.7957							.5638						

X/LT .7460 .8530 .9280

## PHI

.000	-.0529	-.0570	-.0105
30.000	-.0547	-.0299	.0207
60.000	-.0007	.1063	.1205
90.000	-.0388	.0614	
120.000	-.0378	.1061	.7824
135.000	-.0004	.2662	.5386
150.000	.0057	.2995	.5914
165.000	.0046	.2942	.6252
180.000	.0160	.2448	.4498

ALPHA( 5) = -2.870 BETA( 2) = -8.030

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9301	.5325	.0809	-.2185	-.2759	-.3383	-.3129	-.1755	.1090	-.0545	-.1983	-.1818	-.1436	-.0365
30.000			.6314	.1614	-.1536	-.2180	-.2907	-.2584	.0484	-.1158	-.3283	-.1215	-.1045	-.1165	-.1093
60.000			.7389	.2579	-.0783	-.1450	-.2339	-.1779	.2331	-.2017	-.4434	-.2250	-.1957	.0033	.0151
90.000		1.2170	.8157	.3303	-.0240	-.0938	-.1829	-.1115	.6077	-.0306	-.5137	-.2823	-.2833	-.0517	-.0329
120.000			.8286	.3450	-.0162	-.0979	-.1742	-.1073	.4063	-.0306	-.1219	.2517	.1989	.0960	-.0477
135.000							-.1399		.0639		.1468		.0994		
150.000			.7690	.3043	-.0459	-.1148	-.2068	-.1592	.2153	.3618	.2901	.1413	.0130	-.0530	-.0578
165.000				.2493	-.0891	-.1574	-.2395	-.2029	.0886	.4521	.5043	.1560	-.0270	-.1199	-.0898
180.000	1.2290	1.1150	.6783	.1975	-.1207	-.1849	-.2574	-.2389	.1085	.4424	.5366	-.2321	.0466	-.1919	-.1067
270.000		.8536							.6282						

X/LT .7460 .8530 .9280

## PHI



ARC11-716 IA14 Q1+T12+S12N25+AT10 EXTERNAL TANK

(RB1T33)

ALPHA( 3) = -2.870 BETA( 2) = -8.030

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000 -.0393 -.0163 .0138  
 30.000 -.0565 -.0009 .0444  
 60.000 -.0258 .0900 .1438  
 90.000 -.0456 .0855  
 120.000 -.0649 .1164 .6900  
 135.000 -.0266 .2561 .9044  
 150.000 -.0100 .2853 .9070  
 165.000 -.0123 .2803 .6178  
 180.000 .0037 .2446 .4570

ALPHA( 3) = -2.870 BETA( 3) = -5.960

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.2570 .9593 .5803 .0886 -.2145 -.2726 -.3377 -.3032 -.1816 .1470 -.0291 -.1867 -.1896 -.1181 -.0171  
 30.000 .6240 .1535 -.1671 -.2301 -.3003 -.2689 .0498 -.0543 -.2686 -.1559 -.0958 -.1062 -.0848  
 60.000 .7077 .2233 -.1098 -.1736 -.2599 -.2019 .2429 -.1943 -.4413 -.1989 -.2088 -.0291 .0059  
 90.000 1.1810 .7723 .2861 -.0624 -.1308 -.2164 -.1478 .6013 -.5707 -.2906 -.2810 -.0480 -.0462  
 120.000 .7884 .3021 -.0484 -.1181 -.2021 -.1381 .4080 -.0544 -.0880 .1818 .1321 .0721 -.0874  
 135.000 .7642 .2782 -.0647 -.1339 -.2240 -.1781 .2182 .4106 .2090 .0864 .0110 -.0597 -.0882  
 150.000 .2365 -.0955 -.1614 -.2454 -.2111 .1449 .4634 .4965 .0977 -.0615 -.1037 -.1189  
 165.000 1.2570 1.1200 .6865 .2065 -.1184 -.1837 -.2588 -.2333 .1176 .3969 .5496 -.2622 .0940 -.1946 -.1433  
 180.000 .9049 .6195

X/LT .7460 .8530 .9280

PHI

.000 -.0433 -.0169 .0152  
 30.000 -.0446 -.0102 .0413  
 60.000 -.0152 .0800 .1140  
 90.000 -.0454 .1032  
 120.000 -.0690 .0898 .6594  
 135.000 -.0520 .2322 .4851  
 150.000 -.0307 .2612 .4640  
 165.000 -.0227 .2541 .5845  
 180.000 .0030 .2267 .4376

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ARC11-716 1A14 01+712+512N25+AT10 EXTERNAL TANK

(R81733)

ALPHA( 5) = -2.860 BETA( 4) = -3.920

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5560	.6380
PHI															
.000	1.2800	.9765	.5619	.0960	-.2072	-.2627	-.3290	-.2983	-.1501	.1763	.0025	-.1755	-.8091	-.0920	.0106
30.000			.6099	.1407	-.1759	-.2381	-.3037	-.2685	.0557	.0448	-.2228	-.2000	-.0994	-.0896	-.0497
60.000			.6706	.1906	-.1336	-.1974	-.2801	-.2214	.2490	-.1803	-.4222	-.1841	-.1452	-.0898	-.0012
90.000		1.1410	.7250	.2394	-.0973	-.1637	-.2442	-.1773	.5998		-.4843	-.3073	-.2564	-.0560	-.0579
120.000			.7474	.2594	-.0800	-.1461	-.2286	-.1660	.4176	.0298	-.0985	.1329	.0889	.0359	-.1122
135.000								-.1924		.2294		.0391		.0580	
150.000			.7456	.2531	-.0823	-.1486	-.2420	-.1898	.2189	.4350	.1668	.0149	-.0273	-.0775	-.1235
165.000				.2362	-.1007	-.1647	-.2492	-.2127	.1842	.4224	.4908	.0383	-.0355	-.1159	-.1095
180.000	1.2800	1.1270	.6982	.2091	-.1124	-.1816	-.2559	-.2172	.1332	.3645	.5389	-.2195	.0428	-.0626	-.1736
270.000		.9583							.6170						

X/LT .7480 .8330 .9280

## PHI

.000	-.0189	-.0172	-.0057												
30.000	-.0449	-.0033	.0427												
60.000	-.0163	.0662	.1027												
90.000	-.0579	.1085													
120.000	-.1077	.0686	.6162												
135.000	-.0613	.2036	.4455												
150.000	-.0395	.2324	.4217												
165.000	-.0222	.2430	.4920												
180.000	-.0063	.2094	.4003												

ALPHA( 5) = -2.860 BETA( 5) = -2.000

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5560	.6380
PHI															
.000	1.2890	.9662	.5654	.0988	-.2035	-.2597	-.3237	-.2940	-.1496	.1815	.0180	-.1684	-.2308	-.0740	.0175
30.000			.5919	.1232	-.1859	-.2449	-.3113	-.2745	.0443	.0962	-.1808	-.2077	-.1057	-.0770	-.0250
60.000			.6313	.1804	-.1594	-.2196	-.2988	-.2424	.2330	-.1641	-.3878	-.1628	-.0770	-.1298	-.0176
90.000		1.0950	.6727	.1984	-.1312	-.1944	-.2711	-.2084	.5984		-.4724	-.3180	-.2220	-.0650	-.0621
120.000			.7005	.2249	-.1089	-.1740	-.2534	-.2126	.4120	.0631	-.0827	.1092	.0422	.0354	-.1367
135.000								-.2150		.2621		-.0044		.0196	
150.000			.7173	.2310	-.1019	-.1664	-.2561	-.2065	.2175	.4278	.1340	-.0661	-.0491	-.1018	-.1808
165.000				.2267	-.1071	-.1706	-.2545	-.2192	.2065	.3879	.4593	.0214	-.0153	-.1076	-.1840
180.000	1.2890	1.1250	.7003	.2163	-.1131	-.1804	-.2553	-.2131	.1324	.3587	.4939	-.1585	-.0220	-.0806	-.1192
270.000		1.0050							.6008						

X/LT .7480 .8330 .9280

## PHI

TABULATED PRESSURE DATA - 1A14A - VOL. 9

DATE 06 JAN 75

(R81733)

ARC11-716 1A14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 5 ) = -2.860 BETA( 5 ) = -2.000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI  
 .000 - .0065 - .0032 .0022  
 30.000 - .0316 - .0092 .0328  
 60.000 - .0126 .0505 .1040  
 90.000 - .0632 .0971 .4903  
 120.000 - .1055 .0650 .4903  
 135.000 - .0584 .1734 .3321  
 150.000 - .0620 .1894 .3023  
 165.000 - .0224 .1976 .3019  
 180.000 - .0185 .1646 .4125

ALPHA( 5 ) = -2.870 BETA( 6 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6340  
 PHI  
 .000 1.2930 .9847 .5633 .1038 -.2008 -.2580 -.3238 -.2946 -.1369 .1794 .0219 -.1686 -.2362 -.0755 .0259  
 30.000 .5699 .1057 -.1992 -.2582 -.3232 -.2885 .0309 .1234 -.1460 -.2112 -.1280 -.0771 -.0015  
 60.000 .5925 .1225 -.1845 -.2432 -.3180 -.2684 .2414 -.1519 -.3758 -.1476 -.0587 -.1135 -.0444  
 90.000 1.0530 .6271 .1579 -.1625 -.2236 -.2951 -.2389 .5992 -.4752 -.3200 -.1678 -.0608 -.0698  
 120.000 .6805 .1918 -.1384 -.2021 -.2795 -.2497 .3400 .0984 -.0352 .1044 -.0090 .3164 -.1472  
 135.000 .9907 .2089 -.1208 -.1837 -.2713 -.2239 .2228 .3729 .1402 -.1266 -.0673 -.1355 -.1975  
 150.000 .2261 -.1127 -.1767 -.2605 -.2276 .2275 .3844 .3944 -.0260 -.0345 -.0929 -.1484  
 165.000 1.2930 1.1300 .7036 .2227 -.1099 -.1762 -.2571 -.2020 .4867 -.1492 -.0763 -.0714 -.1374  
 180.000 1.0300  
 270.000

X/LT .7460 .8530 .9280

PHI  
 .000 -.0030 -.0020 .0128  
 30.000 -.0256 -.0039 .0186  
 60.000 -.0121 .0408 .1036  
 90.000 -.0410 .0660 .3386  
 120.000 -.0298 .0688 .2200  
 135.000 -.0233 .1468 .1976  
 150.000 -.0344 .1379 .2710  
 165.000 -.0169 .1598 .2536  
 180.000 -.0065 .1614 .2536

ARC11-715 1A14 01+12+S12N25+AT10 EXTERNAL TANK (R81733)

ALPHA( 5) = -2.090 BETA( 7) = 2.020

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2690	.9835	.5600	.0998	-.2022	-.2614	-.3029	-.2935	-.1453	.1566	.0125	-.1682	-.2273	-.0827	.0807
30.000			.5538	.0906	-.2054	-.2678	-.3321	-.2985	.0473	.1394	-.1109	-.2118	-.1386	-.0638	.0046
60.000			.5560	.0914	-.2082	-.2647	-.3332	-.2896	.2090	-.1269	-.3467	-.1447	-.0486	-.0689	-.0729
90.000		1.0070	.5804	.1119	-.1927	-.2505	-.3197	-.2555	.2056	-.14649	-.3282	-.1333	-.0790	-.0774	-.0774
120.000			.6175	.1518	-.1675	-.2297	-.3052	-.2758	.2170	.1423	-.0408	.0723	-.0348	-.0088	-.1637
150.000							-.2607			.3339	-.0559			-.0559	
180.000			.5993	.1825	-.1440	-.2036	-.2922	-.2457	.2224	.3090	.0905	-.1940	-.0689	-.1688	-.8197
190.000				.2057	-.1232	-.1889	-.2700	-.2375	.2137	.3325	.3873	-.0353	-.0430	-.0841	-.1225
200.000	1.2690	1.1260	.7032	.2182	-.1129	-.1779	-.2802	-.1915	.1590	.3459	.4689	-.1378	-.0321	-.0817	-.1462
270.000		1.0970													
X/LT	.7480	.8330	.9280												

PHI

.000	-.0081	-.0177	.0080
30.000	-.0126	-.0352	.0197
60.000	-.0179	.0329	.0940
90.000	-.0036	.0812	
120.000	-.0017	.0834	.2420
150.000	-.0227	.1182	.1459
180.000	-.0230	.1592	.1023
190.000	-.0169	.1385	.2753
200.000	-.0281	.1546	.2291

ALPHA( 5) = -2.770 BETA( 8) = 4.100

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2750	.9712	.5561	.0935	-.2021	-.2649	-.3276	-.2993	-.1077	.1542	.0067	-.1657	-.2091	-.1056	.0072
30.000			.5219	.0643	-.2288	-.2861	-.3447	-.3107	.0734	.1063	-.0895	-.2187	-.1788	-.0654	.0046
60.000			.5114	.0548	-.2335	-.2854	-.3580	-.2948	.1580	-.0964	-.3182	-.1346	-.0569	-.0516	-.0321
90.000		.9320	.5283	.0698	-.2280	-.2804	-.3416	-.2774	.6091	-.0964	-.4641	-.3360	-.1311	-.1075	-.0768
120.000			.5656	.1074	-.2000	-.2605	-.3268	-.2721	.1032	.1881	-.0015	.0322	-.0635	-.0338	-.1777
150.000							-.2819			.2502	-.0885			-.0932	
180.000			.6248	.1537	-.1684	-.2260	-.3109	-.2694	.1839	.2672	.1042	-.2676	-.0917	-.2055	-.2569
190.000				.1889	-.1357	-.2016	-.2834	-.2597	.2023	.3319	.3619	-.0430	-.0915	-.0383	-.1642
200.000	1.2750	1.1260	.6990	.2148	-.1163	-.1819	-.2642	-.1806	.1560	.3261	.4650	-.2043	-.0180	-.1361	-.1560
270.000		1.1440													
X/LT	.7480	.8330	.9280												

PHI



TABULATED PRESSURE DATA - 1A14A - VOL. 9

DATE 06 JAN 75

ARC11-716 1A14 03+T12+S12N25+AT10 EXTERNAL TANK

(R81733)

ALPHA( 5 ) = -2.770 BETA( 3 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI			
.000	-.0235	-.0266	.0004
30.000	-.0110	-.0082	.0199
60.000	-.0361	.0178	.0823
90.000	-.0052	.0807	
120.000	-.0134	.0778	.1752
135.000	-.0354	.0857	.1034
150.000	-.0398	.0651	.0342
165.000	-.0217	.1150	.2065
180.000	-.0411	.1398	.2059

ALPHA( 5 ) = -2.790 BETA( 9 ) = 6.120

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0480 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI														
.000	1.2550	.9524	.5446	.0884	-.2082	-.2716	-.3364	-.3080	-.1398	.1366	-.0061	-.1788	-.1982	-.1431
30.000			.4896	.0379	-.2445	-.2996	-.3566	-.3228	.0354	.1606	-.0909	-.2333	-.1806	-.0699
60.000			.4678	.0190	-.2538	-.3032	-.3746	-.3202	.1353	-.0558	-.3009	-.1229	-.0755	-.0473
90.000		.8980	.4786	.0324	-.2507	-.3032	-.3669	-.0647	.6177	.2432	-.4753	-.3578	-.1325	-.1620
120.000			.5154	.0666	-.2276	-.2856	-.3540	.0009	.0246	.1240	.0755	-.0048	-.0880	-.0751
135.000			.5627	.1194	-.1904	-.2478	-.3339	-.2681	.1527	.2916	.0651	-.3301	-.1309	-.2730
150.000				.1657	-.1494	-.2170	-.2982	-.2633	.1740	.3134	.3300	-.0574	-.0928	-.0908
165.000	1.2550	1.0930	.6830	.1993	-.1241	-.1880	-.2705	-.1732	.1574	.2992	.4439	-.2296	-.0332	-.1647
180.000	1.1900								.6083					

X/LT .7460 .8530 .9280

PHI			
.000	-.0423	-.0257	.0186
30.000	-.0171	.0294	.0225
60.000	-.0314	.0513	.0952
90.000	-.0275	.0880	
120.000	-.0444	.0740	.2132
135.000	-.0624	.0732	.1036
150.000	-.0669	.0511	-.0039
165.000	-.0515	.0849	.2130
180.000	-.0667	.0683	.2492

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ARC11-716 IAI4 OL+T12+S12N3+AT10 EXTERNAL TANK (RB1733)

ALPHA(1) = -2.770 BETA(10) = 8.140

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9205	.5232	-.0730	-.2224	-.2836	-.3508	-.3232	-.1231	.0856	-.0457	-.1911	-.1919	-.1741	-.0630
30.000			.4548	.0101	-.2657	-.3168	-.3721	-.3406	.0496	.1240	-.0973	-.2590	-.2036	-.0941	-.0082
60.000			.4285	-.0137	-.2745	-.3228	-.3903	-.3221	.1153	-.0324	-.2847	-.1058	-.0978	-.0523	-.0092
90.000		.8466	.4322	-.0071	-.2750	-.3243	-.3974	-.0462	.5769	-.4698	-.3873	-.1433	-.1982	-.0662	
120.000			.4698	.0285	-.2582	-.3095	-.3739	-.0118	-.0039	.2682	.0759	-.0489	-.1132	-.1234	-.2000
135.000								-.0102		.0482		-.1276		-.1645	
150.000			.5400	.0840	-.2198	-.2732	-.3541	-.1107	.1285	.2800	.0730	-.3647	-.1611	-.3143	-.2390
165.000				.1423	-.1723	-.2359	-.3145	-.2806	.1356	.2782	.2971	-.0826	-.0983	-.1473	-.2080
180.000	1.2290	1.0250	.6728	.1926	-.1352	-.1993	-.2804	-.1625	.1372	.2661	.4171	-.2065	.0093	-.2080	-.2438
270.000		1.2250							.6107						

X/LT .7480 .8330 .9280

PHI

.000	-.0280	-.0414	.0038
30.000	-.0039	-.0071	.0154
60.000	-.0249	.0130	.1221
90.000	-.0540	.0466	
120.000	-.0598	.0376	.2584
135.000	-.0784	.0764	.1184
150.000	-.0818	.0824	.0019
165.000	-.0810	.0682	.2558
180.000	-.1057	.0690	.2201

ALPHA(1) = -2.770 BETA(11) = 10.100

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1940	.8869	.5066	.0608	-.2307	-.2904	-.3371	-.3335	-.1552	.0227	-.0996	-.1928	-.1936	-.1750	-.0501
30.000			.4212	-.0139	-.2811	-.3330	-.3889	-.3573	.0262	.0723	-.1137	-.2861	-.1848	-.0494	-.0020
60.000			.3933	-.0417	-.2950	-.3393	-.4050	-.1020	.0477	-.0180	-.2362	-.1050	-.0880	-.0175	-.0158
90.000		.7967	.3917	-.0333	-.2956	-.3426	-.3992	-.0629	.5083	-.4694	-.4093	-.1140	-.0869	-.0861	
120.000			.4293	-.0086	-.2798	-.3328	-.3955	-.0413	-.0347	.2474	.0398	-.0835	-.1292	-.1337	-.2313
135.000								-.0281		.0730		-.1547		-.1885	
150.000			.5024	.0532	-.2389	-.2940	-.3765	-.0487	.1065	.2505	.0690	-.4035	-.1920	-.3289	-.2987
165.000				.1260	-.1859	-.2495	-.3296	-.2966	.1035	.2400	.2997	-.0944	-.0787	-.2019	-.2332
180.000	1.1940	.9817	.6614	.1858	-.1371	-.2022	-.2839	-.1449	.0980	.2224	.3607	-.1601	-.0654	-.2736	-.2958
270.000		1.2610							.6172						

X/LT .7480 .8330 .9280

PHI



(RB1733:

INTERNAL SECURITY - TAN 3L+T12+S.2+25+4711 EXTERNAL TAN

DATA: 3 - 277 BETA: 1.000000

SECTION 1001.035  
EXTERNAL TAX

1920	7460	8530	9200
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二

[illegible]
$$\text{BETA0}(1) = -10.520$$

SECTION (1) EXTERNAL TANK

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405</
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11

[illegible]

17	.7400	.0530	.9280
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III

.0000	-.0654	-.0785	-.0364
30.000	-.0447	-.0162	.0063
60.000	.0316	.1365	.1575
90.000	.0028	.0993	
120.000	.0010	.1009	.0341
150.000	.0477	.3121	.5055
180.000	.0316	.3426	.6320
210.000	.0316	.3331	.6421
240.000	.0455	.2750	.4607

(R81733)

ARC11-716 IAI4 01+713+512N25+AT10 EXTERNAL TANK

ALPHA( 6) = -.730 BETA( 2) = -8.420

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2230	.9670	.5733	.1176	-.1889	-.2491	-.3173	-.2992	-.1606	.1090	-.0349	-.1570	-.1680	-.1683	-.0793
30.000			.6871	.2082	-.1129	-.1790	-.2537	-.2308	.0745	-.0904	-.3004	-.1009	-.0953	-.1094	-.1078
60.000			.7862	.3017	-.0431	-.1113	-.2064	-.1377	.3035	-.1447	-.3487	-.1781	-.1877	-.0271	.0266
90.000		1.2380		.8392	-.0063	-.0781	-.1714	-.0929	.6156		-.4529	-.4046	-.2499	-.0734	-.0148
120.000			.8129	.3304	-.0242	-.0950	-.1957	-.1176	.3495	-.0862	-.1194	.1031	.2378	.1373	-.0129
150.000							-.1600			-.0400		.0083		.1344	
180.000			.7502	.2589	-.0742	-.1396	-.2329	-.1881	.1650	.1724	.2833	.0197	.0533	-.0177	-.0396
190.000				.2034	-.1230	-.1889	-.2732	-.2401	.0301	.4224	.4616	.1385	-.0672	-.1022	-.0620
195.000	1.2230	1.0620	.6165	.1586	-.1570	-.2168	-.2939	-.2695	.0451	.4387	.4958	-.2165	-.1003	-.1869	-.1046
270.000		.9375							.0451	.4387	.4958	-.2165	-.1003	-.1869	-.1046
									.6611						

K/LT .7480 .8530 .9280

PMI

.000	-.0525	-.0154	-.0028												
30.000		-.0436	.0156	.0370											
60.000		-.0026	.1214	.1514											
90.000		-.0268	.0989												
120.000		-.0252	.1421	.7374											
150.000		.0195	.2978	.2333											
180.000		.0382	.3854	.5918											
190.000		.0413	.5226	.6288											
190.000	.0468	.2759	.4579												

ALPHA( 6) = -.730 BETA( 3) = -8.290

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.8360	1.0210	.9950	.1317	-.1639	-.2412	-.3091	-.2845	-.2042	.1560	-.0156	-.1621	-.1675	-.1413	-.0313
30.000			.6799	.1990	-.1263	-.1916	-.2662	-.2405	.0749	-.0228	-.2372	-.1274	-.0788	-.0908	-.0819
60.000			.7517	.2617	-.0741	-.1411	-.2310	-.1653	.3083	-.1306	-.3538	-.1557	-.1212	-.0788	.0078
90.000		1.1970		.3008	-.0481	-.1175	-.2047	-.1340	.6112		-.4591	-.4154	-.2724	-.0598	-.0414
120.000			.7696	.2841	-.0593	-.1274	-.2116	-.1496	.3519	-.0733	-.1067	.0104	.1818	.1014	-.0523
150.000							-.1849			.0581		-.0531		.1040	
180.000			.7232	.2404	-.0925	-.1583	-.2479	-.2050	.1680	.3171	.2632	-.0002	.0123	-.0374	-.0685
190.000			.1949	-.1295	-.1921	-.2750	-.2418	.0610	.4253	.4722	.4215	-.1667	-.1236	-.0833	-.0833
190.000	1.8360	1.0730	.6327	.1625	-.1544	-.2168	-.2893	-.2585	.0849	.3848	.5217	-.2441	-.2308	-.1891	-.0949
270.000		.8964							.6453						

K/LT .7480 .8530 .9280

PMI



(881133

PROBLEM 1A14 D+T12-S12N25+AT1C EXTERNAL TANK

ALPHA: 6.0 E = -.730 BETAC 3.0 E = -5.220

SECTION 1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT .7400 .8530 .9280

PHI	
.000	-.0417 -.0085 .0134
30.000	-.0433 .0075 .0449
60.000	.0006 .0680 .1301
90.000	-.0265 .1004
120.000	-.0302 .1449 .0640
150.000	-.0193 .2793 .4977
180.000	.0091 .2974 .5091
195.000	.0171 .2921 .6286
199.000	.0457 .2566 .4497

ALPHA: 6.0 E = -.710 BETAC ( 4 ) = -4.140

SECTION 1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>2</sub>

M/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5900 .6380

PHI	
.000	1.2760 1.0220 .6104 .1409 -.1724 -.2306 -.3315 -.2775 -.2006 .1925 .0167 -.1543 -.1825 -.1122 -.0108
30.000	.6621 .1674 -.1351 -.1998 -.2713 -.2453 .0795 .0642 .1878 .1577 -.1572 -.0899 -.0808 -.0517
60.000	.7399 .2273 -.1033 -.1652 -.2345 -.1913 .3107 .1212 .3431 .1572 -.0587 .1104 -.0193
90.000	1.1340 .7391 .2330 -.0036 -.1304 -.2358 .1673 .6077 .4550 .4224 .8995 .0849 .0594
120.000	.7283 .2517 -.0988 -.1555 -.2384 .1765 .3603 .0367 .0820 .0521 .1162 .0745 .0748
150.000	.7020 .2231 -.1074 -.1721 -.2619 .2146 .1886 .0987 .1894 .0204 .0614 .0421 .0867
165.000	.1983 .1323 .1946 .2757 .2410 .1330 .3997 .4559 .0655 .2031 .1000 .0769
180.000	1.2760 1.0750 .6464 .1683 .1462 .1202 .2852 .2453 .0992 .3149 .5136 .2397 .2575 .0456 .1316
270.000	.9499 .6423

M/LT .7400 .8530 .9280

PHI	
.000	-.0119 -.0130 -.0045
30.000	-.0326 .0088 .0324
60.000	.0054 .0739 .1031
90.000	-.0307 .1097
120.000	-.0684 .1115 .6245
150.000	-.0334 .2476 .4729
180.000	-.0149 .2709 .4766
195.000	-.0010 .2714 .5465
199.000	.0229 .2410 .4099

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OF POOR QUALITY



ARC11-71.6 1A14 C1+12+512N23+Y10 EXTERNAL TANK (RB1T33)

ALPHA0 (6) = -.700 BETA0 (6) = -2.080

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI														
.000	1.8900	1.0360	.6186	.1449	-.1617	-.2219	-.2918	-.2661	.2153	.0394	-.1485	-.2027	-.0917	.0083
30.000			.5456	-.1716	-.1451	-.2079	-.2765	-.2473	.0414	.1159	-.1454	-.1053	-.0730	-.0137
60.000			.5736	.1959	-.1278	-.1695	-.2732	-.2104	.1164	.0989	-.3114	-.0369	-.0650	-.0970
90.000		1.1090	.6873	.2120	-.1154	-.1799	-.2603	-.1937	.6094	-.4483	-.4317	-.3107	-.1039	-.0476
120.000			.6660	.2159	-.1156	-.1794	-.2592	-.2005	.3738	-.0090	-.1151	-.0507	.0536	-.0979
150.000							-.2237		.1973		-.1071		.0807	
180.000			.5776	.2131	-.1219	-.1862	-.2761	-.2255	.2507	.3948	.1392	-.0897	-.1056	-.1191
210.000			.6468	.1917	-.1348	-.1965	-.2774	-.2430	.1652	.3591	.4401	.0032	-.1520	-.0652
270.000		1.0020		.1727	-.1405	-.2012	-.2809	-.2277	.1703	.2951	.4943	-.1629	-.2066	-.0517
														-.0980

K/LT .7480 .8530 .9280

PHI

.000	.0061	.0078	.0185
30.000	-.0196	.0126	.0177
60.000	-.0019	.0673	.0953
90.000	-.0340	.1086	
120.000	-.0777	.0582	.5469
150.000	-.0350	.2189	.4006
180.000	-.0365	.2437	.3633
210.000	.0003	.2436	.3168
270.000	.0060	.2098	.4250

ALPHA0 (6) = -.700 BETA0 (6) = .030

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI														
.000	1.8970	1.0360	.6182	.1477	-.1599	-.2231	-.2924	-.2669	.2106	.0391	-.1355	-.2075	-.0756	.0465
30.000			.6219	.1485	-.1599	-.2225	-.2919	-.2640	.0523	.1574	-.1136	-.1681	-.1294	-.0659
60.000			.6274	.1485	-.1597	-.2166	-.2999	-.2386	.3073	-.0072	-.2832	-.1875	-.0316	-.0965
90.000		1.0590	.6366	.1648	-.1527	-.2135	-.2894	-.2278	.6123	-.4549	-.4206	-.2656	-.1049	-.0810
120.000			.6421	.1669	-.1483	-.2080	-.2859	-.2305	.3787	.0291	-.0406	-.1350	-.0026	-.1167
150.000							-.2482		.2319		-.1558		.0123	
180.000			.6492	.1711	-.1436	-.2039	-.2915	-.2423	.1988	.3874	.0902	-.1569	-.1265	-.0610
210.000			.6516	.1776	-.1421	-.2021	-.2859	-.2505	.1972	.3515	.3929	-.0372	-.1715	-.0857
270.000		1.0540		.1761	-.1405	-.2013	-.2836	-.2219	.1195	.3342	.4556	-.1395	-.0937	-.0463
														-.1144

K/LT .7480 .8530 .9280

PHI

.000	.0061	.0078	.0185
30.000	-.0196	.0126	.0177
60.000	-.0019	.0673	.0953
90.000	-.0340	.1086	
120.000	-.0777	.0582	.5469
150.000	-.0350	.2189	.4006
180.000	-.0365	.2437	.3633
210.000	.0003	.2436	.3168
270.000	.0060	.2098	.4250



RB1733

ARC11-712 1A12 01+T12+S12N2+AT10 EXTERNAL TANK

ALPHA (6) = -.700 BETA (6) = .030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.7460	.8330	.9280
PMI			
.000	.0096	.0641	.0194
30.000	-.0010	.0125	.0255
60.000	-.0214	.0461	.0863
90.000	-.0047	.0855	
120.000	-.0065	.0937	.3957
135.000	.0022	.1789	.2577
150.000	-.0135	.1744	.2209
165.000	.0152	.1895	.2921
180.000	.0242	.1895	.2614

ALPHA (6) = -.700 BETA (7) = 2.180

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3480	.3940	.4310	.5050	.5580	.6380
PMI															
.000	1.2920	1.0710	.6131	.1416	-.1713	-.2327	-.3001	-.2700	-.1788	.1950	.0284	-.1460	-.2013	-.0957	.0105
30.000			.5953	.1210	-.1843	-.2465	-.3129	-.2840	.0708	.1296	-.0775	-.1770	-.1940	-.0882	.0007
60.000			.5817	.1191	-.1950	-.2484	-.3299	-.2732	.2463	-.0644	-.2639	-.2085	-.0426	-.0394	-.0342
90.000		1.0100	.5827	.1186	-.1929	-.2512	-.3103	-.2655	.6173		-.4615	-.3947	-.2344	-.1265	-.0932
120.000			.5943	.1270	-.1825	-.2455	-.3180	-.2681	.3370	.0664	-.0303	-.1051	-.0452	-.0019	-.1331
135.000								-.2756		.2788		-.1703		-.0360	
150.000			.6178	.1439	-.1703	-.2291	-.3129	-.2650	.1789	.3374	.1140	-.2406	-.1321	-.1281	-.1888
165.000				.1616	-.1573	-.2190	-.2989	-.2642	.1840	.3244	.3606	-.0383	-.1235	-.0427	-.1044
180.000	1.2920	1.0740	.6473	.1686	-.1487	-.2153	-.2907	-.2172	.1364	.3015	.4309	-.1179	-.1019	-.0671	-.1273
270.000		1.1030							.6162						

W/LT .7460 .8330 .9280

PMI	.0000	.0018	.0012	.0336	.0657	.0620	.2464	.1619	.1179	.2754	.2318
.000	.0023	-.0100	.0272								
30.000	.0018	.0012	.0336								
60.000	-.0155	.0323	.0657								
90.000	.0139	.0620									
120.000	.0144	.1100	.2464								
135.000	.0044	.1412	.1619								
150.000	.0012	.1306	.1179								
165.000	.0071	.1651	.2754								
180.000	-.0012	.1890	.2318								

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ARC11-715 IA14 01+112+512+23+Y10 EXTERNAL TANK

(R81733)

ALPHA( 6 ) = -.710 BETA( 8 ) = 4.270

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2790	1.0190	.6045	.1365	-.1731	-.2332	-.3053	-.2775	-.1501	.1855	.0223	-.1441	-.1903	-.1174	-.0041
30.000			.5581	.0922	-.2004	-.2619	-.3266	-.2937	.0739	.1852	-.0793	-.1934	-.1742	-.0646	-.0078
60.000			.5338	.0719	-.2211	-.2716	-.3498	-.3014	.1479	-.0206	-.2487	-.1937	-.0561	-.0478	-.0264
90.000		.9559	.5301	.0727	-.2227	-.2783	-.3175	-.2356	.6216		-.4651	-.3606	-.2433	-.1209	-.0946
120.000			.5465	.0877	-.2094	-.2699	-.3387	-.2929	.2147	.1028	-.0054	-.0804	-.0753	-.0291	-.1503
135.000								-.2971		.2649		-.1782		-.0786	
150.000			.5850	.1144	-.1918	-.2474	-.3310	-.2873	.1538	.2530	.0926	-.3046	-.1473	-.1651	-.2266
165.000				.1534	-.1663	-.2302	-.3104	-.2764	.1720	.3122	.3390	-.0513	-.1257	-.0352	-.1314
180.000	1.2790	1.0750	.6444	.1720	-.1500	-.2123	-.2947	-.2094	.1311	.2860	.4336	-.1910	-.0329	-.1177	-.1382
270.000		1.1510							.6165						

X/LT .7460 .8530 .9280

PHI

.000	-.0118	-.0220	.0002												
30.000	.0012	.0018	.0325												
60.000	-.0062	.0384	.0848												
90.000	.0105	.0580													
120.000	.0102	.1044	.1803												
135.000	-.0126	.1079	.1256												
150.000	-.0180	.0856	.0508												
165.000	.0018	.1352	.2238												
180.000	-.0155	.1569	.2315												

ALPHA( 6 ) = -.730 BETA( 9 ) = 6.350

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2580	.9989	.5917	.1280	-.1797	-.2469	-.3158	-.2898	-.1392	.1500	-.0004	-.1551	-.1775	-.1440	-.0328
30.000			.5289	.0642	-.2301	-.2879	-.3484	-.3046	.0361	.1798	-.0653	-.2094	-.1904	-.0827	-.0135
60.000			.4871	.0396	-.2513	-.3014	-.3714	-.3227	.0788	-.0002	-.2266	-.1783	-.0719	-.0463	-.0219
90.000		.9001	.4758	.0297	-.2551	-.3070	-.3493	-.1615	.6234		-.4655	-.3145	-.2314	-.1163	-.0823
120.000			.4960	.0488	-.2422	-.2996	-.3640	-.2062	.0977	.1382	-.0056	-.0848	-.1049	-.0333	-.1940
135.000								-.2780		.2245		-.1825		-.1176	
150.000			.5446	.0817	-.2182	-.2740	-.3543	-.3059	.1322	.2180	.0327	-.3626	-.1749	-.2475	-.2089
165.000				.1234	-.1875	-.2305	-.3248	-.2912	.1460	.2866	.3085	-.0737	-.1067	-.0899	-.1624
180.000	1.2580	1.0410	.6291	.1527	-.1637	-.2249	-.3019	-.2052	.1290	.2674	.4073	-.2248	-.0370	-.1350	-.1793
270.000		1.1990							.6171						

X/LT .7460 .8530 .9280

PHI

.000															
30.000															
60.000															
90.000															
120.000															
135.000															
150.000															
165.000															
180.000															
270.000															



(R01133)

ARC11-715 IATA DATA:2+512+25+AT10 EXTERNAL TANK

ALPHA( 6 ) = -.730 BETA( 9 ) = 6.350

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

.000 -.0333 -.0170 .0083  
30.000 -.0056 .0330 .0230  
60.000 -.0111 .0343 .0990  
90.000 -.0001 .0859  
120.000 -.0201 .0377 .2173  
135.000 -.0357 .0964 .1216  
150.000 -.0434 .0725 .0125  
165.000 -.0278 .1019 .2255  
180.000 -.0442 .1106 .2620

ALPHA( 6 ) = -.730 BETA( 10 ) = 8.130

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

1.8290 .9687 .5725 .1128 -.1891 -.2561 -.3232 -.2951 -.1174 .0993 -.0386 -.1616 -.1734 -.1729 -.0882  
.0000 .4914 .4914 .0407 -.2455 -.3002 -.3614 -.3279 .0671 .1313 -.0793 -.2346 -.2044 -.0909 -.0140  
60.000 .4901 .0024 -.2666 -.3166 -.3863 -.3256 .0341 .0103 -.2163 -.1763 -.0904 -.0470 -.0019  
90.000 .8525 .4361 .0026 -.2681 -.3232 -.3811 -.1773 .6154 .0103 -.4510 -.3030 -.2246 -.1087 -.0589  
120.000 .4582 .0156 -.2637 -.3171 -.3777 -.0577 .0029 .1580 -.0056 -.1027 -.1324 -.0797 -.1690  
135.000 .5108 .0599 -.2391 -.2899 -.3673 -.1919 .1157 .1300 .2275 .0525 -.3912 -.1950 -.2785 -.2013  
150.000 .6210 .1043 -.2017 -.2627 -.3342 -.3024 .1259 .2583 .2776 .2776 .1103 -.0791 -.1553 -.1737  
180.000 1.2300 .1474 -.1707 -.2335 -.3076 -.1948 .1159 .2359 .3809 -.2189 -.0754 -.2401 -.2810  
270.000 .9280 .6217

X/LT .7460 .8530 .9280

PHI

-.0283 -.0231 -.0064  
30.000 .0089 .0022 .0129  
60.000 -.0017 .0197 .1056  
90.000 -.0067 .0763 .3094  
120.000 -.0288 .0659 .1476  
135.000 -.0474 .1051 .0289  
150.000 -.0512 .0826 .2290  
165.000 -.0495 .0865 .2290  
180.000 -.0738 .1022 .2493

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 01+112+512N25+AT10 EXTERNAL TANK (R81733)

ALPHA( 6 ) = -.790 BETAO (11) = 10.110

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE C <sub>P</sub>														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI																
.000	1.1990	.9329		.5525	.0972	-.2074	-.2633	-.3325	-.3125	-.1367	.0286	-.0887	-.1585	-.1776	-.1939	-.0427
30.000				.4925	.0126	-.2645	-.3200	-.3796	-.3335	.0396	.0677	-.1396	-.2618	-.1886	-.0902	-.0022
60.000				.4079	-.0282	-.2900	-.3382	-.4038	-.3388	.0767	.0314	-.1974	-.1165	-.0780	-.0098	-.0101
90.000				.8332	-.0311	-.2920	-.3413	-.4030	-.0958	.6310		-.4402	-.2922	-.1733	-.1361	-.0740
120.000					.4176	-.0156	-.2851	-.3359	-.0567	-.0651	.2045	-.0139	-.0814	-.1562	-.1074	-.2016
135.000									-.0457		.0124		-.2032		-.1530	
150.000				.4779	.0291	-.2571	-.3090	-.3902	-.0463	.0891	.2635	.0547	-.4293	-.1942	-.2623	-.2842
165.000					.0985	-.2122	-.2743	-.3548	-.3231	.0959	.2244	.2578	-.1239	-.0344	-.1913	-.1950
180.000	1.1990	.9246		.5154	.1386	-.1711	-.2355	-.3142	-.1903	.1011	.1960	.3249	-.1791	-.0927	-.2697	-.2834
270.000		1.2650														
X/LT	.7460	.8930	.9290													

ALPHA( 7 ) = 2.010 BETAO ( 1 ) = -10.080

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE C <sub>P</sub>														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI																
.000	1.1930	.9976		.6202	.1560	-.1631	-.2239	-.2989	-.2754	-.0939	-.0088	-.0595	-.1230	-.1480	-.1682	-.0783
30.000				.7639	.2839	-.0586	-.1302	-.2098	-.1840	.1222	-.0567	-.3301	-.0886	-.0663	-.0866	-.0823
60.000				.8655	.3800	.0158	-.0372	-.1571	-.0814	.3755	-.0956	-.2389	-.1220	-.0721	-.0329	.0224
90.000				1.2670	.3948	.0274	-.0473	-.1404	.0667	.6208		-.3599	-.3886	-.2653	-.2180	-.0311
120.000					.8023	.3267	-.0305	-.1013	-.1956	.2722	-.1740	-.3104	-.2165	.2517	.2233	.0954
135.000									-.1824		-.1345		.0232		.1886	
150.000				.6935	.2233	-.1091	-.1745	-.2647	-.2165	.0812	-.1159	.2695	-.0551	.0157	.0396	.0248
165.000					.1474	-.1739	-.2360	-.3180	-.2821	-.0332	.3236	.4152	.1723	-.2027	-.0455	-.0038
180.000	1.1930	.9913		.5435	.0941	-.2130	-.2685	-.3376	-.2967	.0188	.4028	.4673	-.1896	-.3330	-.1412	-.0714
270.000		.7907								.6706						
X/LT	.7460	.8530	.9280													

PHI



DATE: 03 JAN 73 CALCULATED PRESSURE ENT - 14144 - VOL. 3

(RB1133)

ARC11-715 1114 CR-112-S12N25+AT1D EXTERNAL TANK

ALPHA( 7) = 2.010 BETA( 1) = -10.080

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI			
.000	-.0648	-.0322	-.0447
30.000	-.0168	.0232	.0195
60.000	.0475	.1595	.1616
90.000	.0113	.0908	
120.000	.0399	.1692	.8759
135.000	.0894	.3673	.5289
150.000	.0968	.3832	.6683
165.000	.1072	.3714	.6891
180.000	.0908	.3055	.4702

ALPHA( 7) = 2.000 BETA( 2) = -8.040

SECTION ( 1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2500 .3440 .3940 .4510 .5050 .5580 .6380

PHI														
.000	1.2290	1.0360	.6434	.1735	-.1446	-.2099	-.2324	-.2562	-.1580	.1151	-.0206	-.1171	-.1400	-.1375
30.000			.7537	.2698	-.0719	-.1412	-.2193	-.1898	.1274	-.0169	-.2473	-.0805	-.0559	-.0849
60.000			.8252	.3380	-.0191	-.0879	-.1938	-.1078	.3776	-.0818	-.2638	-.1219	-.0385	-.0612
90.000	1.2300		.8305	.3398	-.0171	-.0859	-.1752	-.0960	.6114	-.3803	-.3845	-.3845	-.2818	-.2057
120.000			.7641	.2877	-.0611	-.1332	-.2170	-.1494	.2684	-.1667	-.2712	-.2279	.1967	.1737
135.000			.6811	.2053	-.1247	-.1888	-.2747	-.2288	.1013	-.0201	.2706	-.1011	-.0409	.1552
150.000				.1488	-.1724	-.2357	-.3139	-.2780	-.0028	.3741	.4361	.1340	-.2041	.0160
165.000			.5599	.1027	-.2020	-.2593	-.3296	-.2861	.0703	.3918	.4725	-.2190	-.2960	-.0761
180.000	1.2290	1.0030	.8460						.0703	.3918	.4725	-.2190	-.2960	-.0761
270.000									.6631					-.0599

X/LT .7480 .8530 .9280

PHI			
.000	-.0314	.0036	-.0164
30.000	-.0379	.0343	.0411
60.000	.0198	.1387	.1538
90.000	-.0086	.0728	
120.000	.0170	.1759	.7765
135.000	.0662	.3471	.5681
150.000	.0812	.3641	.6206
165.000	.0974	.3591	.6426
180.000	.0990	.3066	.4590

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OI+T12+S12N25+AT10 EXTERNAL TANK  
(R81T33)

ALPHA( 7) = 2.050 BETA( 3) = -6.043

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2560	1.0660	.6643	.1882	-.1368	-.2027	-.2750	-.2492	-.1922	.1815	.0123	-.1203	-.1418	-.1117	-.0559
30.000			.7441	-.2540	-.0824	-.1324	-.2294	-.2035	.1338	.0389	-.1795	-.0941	-.0539	-.0704	-.0546
60.000			.7878	-.2966	-.0499	-.1188	-.2129	-.1415	.3799	-.0650	-.2597	-.1151	-.0216	-.0353	-.0410
90.000		1.1890	.7805	-.2919	-.0545	-.1240	-.2103	-.1481	.6035		-.3965	-.3472	-.2928	-.2010	-.0751
120.000			.7233	-.2420	-.0942	-.1617	-.2450	-.1815	.2641	-.1603	-.2758	-.2516	.1440	.1299	.0110
135.000								-.2204		-.0364		-.1571		.1184	
150.000			.6558	.1809	-.1422	-.2040	-.2884	-.2434	.0995	.1612	.2734	-.1287	-.1036	.0048	-.0242
165.000				.1449	-.1794	-.2424	-.3151	-.2798	.0782	.3833	.4270	.1068	-.2613	-.0630	-.0360
180.000	1.2560	1.0340	.5658	.1072	-.2001	-.2594	-.3284	-.2834	.0670	.3351	.4874	-.2337	-.3157	-.0685	-.0657
270.000		.8975													.6464

X/LT .7460 .8530 .9280

PHI

.000	-.0274	-.0074	.0116
30.000	-.0276	.0265	.0299
60.000	.0137	.0978	.1276
90.000	-.0145	.0532	
120.000	-.0108	.1746	.7065
135.000	.0363	.3277	.5315
150.000	.0508	.3408	.5827
165.000	.0683	.3366	.5915
180.000	.0819	.2945	.4387

ALPHA( 7) = 1.920 BETA( 4) = -3.990

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2750	1.0860	.5745	.1934	-.1296	-.1943	-.2689	-.2428	-.1744	.2212	.0454	-.1206	-.1530	-.0967	-.0879
30.000			.7278	.2331	-.0996	-.1681	-.2407	-.2131	.1221	.1068	-.1154	-.0701	-.0685	-.0381	
60.000			.7423	.2508	-.0845	-.1532	-.2373	-.1747	.3779	-.0321	-.2453	-.1322	-.0116	-.0256	-.0310
90.000		1.1470	.7306	.2461	-.0906	-.1597	-.2405	-.1786	.6001		-.4327	-.2760	-.2446	-.1765	-.1004
120.000			.6852	.2089	-.1225	-.1874	-.2650	-.2050	.2762	-.1124	-.2498	-.2739	.0874	.0881	-.0224
135.000								-.2334		.0188		-.2020		.0831	
150.000			.6418	.1721	-.1540	-.2133	-.2958	-.2499	.1378	.2563	.2449	-.1206	-.1733	-.0038	-.0488
165.000				.1429	-.1804	-.2394	-.3127	-.2770	.1360	.3584	.4282	.0647	-.3086	-.0158	-.0349
180.000	1.2780	1.0120	.5758	.1106	-.1925	-.2510	-.3187	-.2548	.0649	.2696	.4886	-.2128	-.3286	-.0279	-.0512
270.000		.9338													

X/LT .7460 .8530 .9280

PHI

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DATE 03 JAN 75 TABULATED PRESSURE DATA - IAL40 - VOL. 9

(RB1733)

ARC11-716 IAL4 ON+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 7) = 1.920 BETA( 4) = -3.990

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI

.000	-.0025	.0075	.0224
30.000	-.0108	.0326	.0292
60.000	-.0006	.0815	.1069
90.000	-.0279	.0611	
120.000	-.0362	.1440	.6289
135.000	.0084	.2902	.4812
150.000	.0255	.3064	.5112
165.000	.0322	.3131	.5544
180.000	.0621	.2693	.4199

ALPHA( 7) = 1.920 BETA( 5) = -2.020

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2920	1.0970	.6792	.1995	-.1262	-.1920	-.2648	-.2376	-.1719	.2359	.0635	-.1139	-.1608	-.0880	-.0077
30.000			.6995	.2151	-.1144	-.1820	-.2553	-.2261	.0869	.1506	-.0903	-.1203	-.1109	-.0646	-.0208
60.000			.6997	.2166	-.1147	-.1771	-.2624	-.2039	.3763	-.0345	-.2225	-.1771	-.0177	-.0204	-.0129
90.000		1.1030	.6787	.2044	-.1267	-.1917	-.2679	-.2091	.5978		-.4615	-.1858	-.0330	-.0630	-.0734
120.000			.6481	.1764	-.1493	-.2112	-.2851	-.2283	.2910	-.0805	-.2004	-.2602	.0466	.0708	-.0444
135.000			.6203	.1488	-.1678	-.2276	-.3075	-.2552	.2079	.0724	.1667	-.1179	-.1759	-.0106	-.0748
150.000				.1296	-.1819	-.2410	-.3151	-.2789	.1252	.3038	.4086	.0173	-.2277	-.0150	-.0486
165.000	1.2920	1.0150	.5839	.1108	-.1872	-.2489	-.3185	-.2330	.0945	.2484	.4552	-.1489	-.2677	-.0182	-.0727
270.000		1.0060							.6349						

X/LT .7460 .8330 .9280

PHI

.000	.0107	.0166	.0379
30.000	.0018	.0299	.0437
60.000	-.0003	.0740	.0956
90.000	-.0266	.1014	
120.000	-.0494	.1432	.5219
135.000	-.0104	.2587	.4046
150.000	-.0054	.2725	.4082
165.000	.0385	.2722	.5062
180.000	.0398	.2351	.4145

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ARC11-716 1A:4 Q:Y12+S12N25+AT10 EXTERNAL TANK

(RB1733)

ALPHA( 7) = 1.920 BETA( 6) = .010

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.2970	1.1010	.6817	.2037	-.1248	-.1889	-.2633	-.2364	-.1602	.2411	.0631	-.1170	-.1628	-.0859	.0001
30.000			.6749	.1964	-.1305	-.1960	-.2669	-.2403	.0909	.1492	-.0586	-.1291	-.1434	-.0677	-.0036
60.000			.6554	.1808	-.1438	-.2047	-.2904	-.2437	.3156	-.0145	-.2005	-.1887	-.0327	-.0319	-.0221
90.000		1.0550	.6307	.1571	-.1599	-.2214	-.2935	-.2395	.5993		-.4791	-.1670	-.0329	-.0643	-.0831
120.000			.6052	.1371	-.1745	-.2349	-.3066	-.2499	.3171	-.0553	-.1529	-.2435	.0009	.0446	-.0640
135.000							-.2653	-.2653		.1466		-.2184		.0475	
150.000			.5956	.1257	-.1817	-.2416	-.3217	-.2687	.1805	.3432	.0839	-.1776	-.1979	-.0200	-.1196
165.000				.1248	-.1878	-.2441	-.3186	-.2815	.1337	.2927	.3749	-.0474	-.2527	-.0137	-.0763
180.000	1.2970	1.0130	.5670	.1186	-.1860	-.2472	-.3178	-.2484	.0928	.2718	.4140	-.0993	-.2103	-.0036	-.0645
270.000		1.0340							.6219						

X/LT .7460 .8530 .9280

## PHI

.000	.0139	.0145	.0249
30.000	.0089	.0235	.0337
60.000	.0011	.0589	.0991
90.000	-.0030	.0929	
120.000	.0147	.1245	.4126
135.000	.0227	.2117	.2799
150.000	.0036	.2083	.2593
165.000	.0430	.2209	.3060
180.000	.0334	.2183	.2796

ALPHA( 7) = 1.920 BETA( 7) = 2.050

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0580	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.2900	1.0930	.6751	.1993	-.1304	-.1947	-.2679	-.2392	-.1691	.2435	.0574	-.1172	-.1625	-.0924	-.0046
30.000			.6436	.1689	-.1538	-.2180	-.2936	-.2577	.0811	.1854	-.0542	-.1496	-.1531	-.0816	-.0135
60.000			.6103	.1335	-.1762	-.2350	-.3155	-.2760	.1382	.0100	-.1873	-.1817	-.0421	-.0408	-.0264
90.000		1.0060	.5825	.1125	-.1959	-.2548	-.3228	-.2684	.6038		-.5014	-.1477	-.0479	-.0632	-.0835
120.000			.5651	.1109	-.2049	-.2805	-.3269	-.2760	.2953	-.0213	-.1171	-.1885	-.0390	.0085	-.0868
135.000							-.2833	-.2833		.2005		-.2296		.0043	
150.000			.5687	.1008	-.2008	-.2587	-.3366	-.2851	.1440	.3307	.1013	-.2562	-.1956	-.0632	-.1513
165.000				.1094	-.1967	-.2558	-.3293	-.2930	.1555	.3072	.3247	-.0442	-.2275	-.0218	-.0691
180.000	1.2900	1.0120	.5835	.1119	-.1908	-.2515	-.3241	-.2407	.1149	.2791	.4098	-.1027	-.1825	-.0119	-.0801
270.000		1.1010							.6144						

X/LT .7460 .8530 .9280

## PHI

.000	.0139	.0145	.0249
30.000	.0089	.0235	.0337
60.000	.0011	.0589	.0991
90.000	-.0030	.0929	
120.000	.0147	.1245	.4126
135.000	.0227	.2117	.2799
150.000	.0036	.2083	.2593
165.000	.0430	.2209	.3060
180.000	.0334	.2183	.2796



DATE 06 JAN 72 TABULATED PRESSURE DATA - INCH - VOL. 9

PROB-715 TALS OL-AT12-S12-25+T110 EXTERNAL TANK (RB1733)

ALPHA( 7 ) = 1.920 BETA( 7 ) = 2.050

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .9530 .9280

PHI

.000 .0074 .0082 .0422  
30.000 .3085 .0093 .0396  
60.000 .0074 .0375 .1153  
90.000 .0153 .0611  
120.000 .0403 .1362 .2875  
135.000 .0335 .1752 .1840  
150.000 .0275 .1678 .1443  
165.000 .0411 .1942 .2956  
180.000 .0336 .2193 .2506

ALPHA( 7 ) = 1.900 BETA( 8 ) = 4.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PHI

.000 1.2790 1.0770 .6675 .1887 -.1339 -.1977 -.2728 -.2475 -.1618 .2171 .0475 -.1131 -.1642 -.1136 -.0313  
30.000 .6103 .1401 -.1723 -.2343 -.3035 -.2697 -.0155 .2262 -.1639 -.1999 -.0946 -.0194  
60.000 .5637 .0939 -.2015 -.2594 -.3387 -.2930 .0999 .0389 .1630 .1729 .0666 .0619 .0281  
90.000 .9602 .0705 .2225 .2774 .3460 .2663 .6229 .0137 .0909 .1591 .0711 .0137 .1010  
120.000 .5270 .0711 .2243 .2794 .3460 .2927 .2390 .2231 .2350 .0378  
135.000 .5429 .0732 .2172 .2728 .3497 .3005 .1012 .2674 .1001 .1992 .1055 .1771  
150.000 .0993 .2005 .2617 .3361 .3036 .1371 .2863 .3091 .0324 .2137 .0263 .0845  
165.000 .1163 .1913 .2505 .3264 .2378 .1108 .2583 .4073 .1652 .2000 .0929 .0955  
180.000 .0226 .1931 .2501 .5137

X/LT .7480 .9530 .9280

PHI

.000 .0030 .0002 .0480  
30.000 .0103 .0117 .0430  
60.000 .0051 .0300 .1233  
90.000 .0160 .0602  
120.000 .0410 .1335 .2025  
135.000 .0241 .1427 .1424  
150.000 .0226 .1178 .0773  
165.000 .0326 .1751 .2454  
180.000 .0226 .1931 .2501

## ARC11-716 1A14 01+712+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHA(7) = 2.040 BETA(9) = 6.080

SECTION ( 1 )EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.2590	1.0680	.6801	.1808	-.1398	-.2063	-.2811	-.2522	-.1334	.1628	.0210	-.1206	-.1588	-.1228	-.0614	
30.000			.5752	.1118	-.1977	-.2595	-.3246	-.2899	-.0694	.2298	-.0387	-.1810	-.1626	-.0975	-.0282	
60.000			.5164	.0553	-.2337	-.2896	-.3576	-.2993	.2431	.0712	-.1653	-.1354	-.1062	-.0722	-.0333	
90.000		.9033	.4852	.0360	-.2511	-.3066	-.3704	-.0126	.6487		-.5351	-.0837	-.1423	-.0677	-.0742	
120.000			.4805	.0363	-.2527	-.3076	-.3685	-.3175	.1320	.0427	-.0936	-.0834	-.1044	-.0417	-.1092	
135.000								-.3245		.2402		-.2360		-.0766		
150.000			.5083	.0483	-.2421	-.2940	-.3675	-.3198	.0863	.2228	.0474	-.3670	-.2048	-.1325	-.1604	
165.000				.0778	-.2203	-.2803	-.3502	-.3156	.1215	.2624	.2903	-.0732	-.1927	-.0367	-.1134	
180.000	1.2590	.9998	.5682	.1003	-.2023	-.2621	-.3340	-.2492	.1036	.2389	.3772	-.2097	-.2409	-.0690	-.1160	
270.000		1.1880							.6165							
X/LT		.7460	.8530	.9280												

PHI																
.000	-.0163	-.0052	.0269													
30.000	.0014	.0445	.0436													
60.000	-.0064	.0628	.1121													
90.000	.0165	.0762														
120.000	.0254	.1310	.2084													
135.000	.0087	.1282	.1333													
150.000	.0023	.1054	.0318													
165.000	.0212	.1420	.2900													
180.000	.0078	.1579	.2961													

ALPHA(7) = 2.030 BETA(10) = 8.110

SECTION 11 EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI																
.000	1.2300	1.0320	.6387	.1665	-.1491	-.2144	-.2889	-.2635	-.0978	.0739	-.0176	-.1245	-.1540	-.1435	-.0953	
30.000			.5347	.0799	-.2213	-.2773	-.3410	-.3137	.0468	.1586	-.0553	-.2001	-.1922	-.1066	-.0352	
60.000			.4660	.0172	-.2604	-.3138	-.3558	-.3175	.2188	.0791	-.1682	-.1101	-.1280	-.0753	-.0341	
90.000		.8475	.4364	-.0041	-.2755	-.3259	-.3671	-.0288	.6282		-.5417	-.0826	-.1727	-.0648	-.0612	
120.000			.4361	-.0025	-.2729	-.3259	-.3671	-.1434	.1046	.0770	-.0911	-.0408	-.1390	-.0648	-.1178	
135.000								-.1747		.1987		-.2188		-.1107		
150.000			.4718	.0204	-.2640	-.3115	-.3832	-.2760	.0716	.2044	.0296	-.4126	-.2133	-.1797	-.1601	
165.000			.0352	-.2367	-.2922	-.3652	-.3309		.0895	.2255	.2594	-.1259	-.1846	-.1139	-.1580	
180.000	1.2300	.9076	.5586	.0891	-.2115	-.2714	-.3440	-.2578	.1007	.1977	.3418	-.2170	-.2641	-.1818	-.1643	
270.000		1.2320							.6193							
X/LT		.7460	.8530	.9280												

PHI



DATE OF JAN 75 CALCULATED PRESSURE DATA - I4144 - VOL. 9

ARC11-716 I414 DI-112-S12K25+AT10 EXTERNAL TANK (RB1733)

ALPHA( 7) = 2.030 BETA( 10) = 8.110

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8530 .9280

PMI  
 .000 -.0208 -.0085 -.0216  
 30.000 .0186 .0172 .0229  
 60.000 .0001 .0250 .1077  
 90.000 .0072 .0925  
 120.000 .0155 .1207 .2654  
 150.000 -.0035 .1328 .1566  
 180.000 -.0090 .1105 .0303  
 210.000 -.0006 .1147 .2601  
 240.000 -.0242 .1427 .2821

ALPHA( 7) = 2.350 BETA( 11) = 10.150

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI  
 .000 1.1980 1.0060 .6245 .1606 -.1561 -.2207 -.2966 -.2731 -.0966 -.0037 -.0575 -.1260 -.1490 -.1610 -.0763  
 30.000 .4966 .0338 -.2395 -.3023 -.3666 -.3427 .0507 .1288 -.0759 -.2058 -.1475 -.0699 -.0092  
 60.000 .4239 -.0150 -.2893 -.3403 -.3642 -.3354 .1514 .1069 -.1516 -.0754 -.1395 -.0208 -.0477  
 90.000 .3940 -.0384 -.3022 -.3491 -.4047 -.0502 .6124 -.4959 -.0656 -.1853 -.0420 -.0777  
 120.000 .3961 -.0334 -.2996 -.3496 -.4058 -.0671 .0116 .1022 -.0915 -.0469 -.1074 -.0695 -.1413  
 150.000 .4334 -.0114 -.2883 -.3362 -.4076 -.0796 .0357 .2335 .0239 -.4452 -.1884 -.1627 -.2313  
 180.000 .0283 -.2567 -.3154 -.3874 -.2912 .0542 .1851 .2284 -.1503 -.1784 -.1522 -.1297  
 210.000 1.1980 .0413 .0694 -.2232 -.2843 -.3579 -.2664 .1561 .2722 -.1802 -.1787 -.2509 -.2014  
 240.000 1.2690 .6253

K/LT .7460 .8530 .9280

PMI  
 .000 -.0633 -.0450 -.0316  
 30.000 -.0184 -.0141 -.0030  
 60.000 -.0332 -.0018 .1039  
 90.000 -.0237 .0723  
 120.000 -.0007 .1040 .2592  
 150.000 -.0245 .1224 .1398  
 180.000 -.0294 .0964 .0560  
 210.000 -.0347 .0887 .2608  
 240.000 -.0708 .1126 .2446

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4 - 3

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

(RB1733)

ALMAQ( 8 ) = 4.300 BETA0 ( 1 ) = -9.983

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0450	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	1.0490	.6779	.2097	-.1223	-.1864	-.2637	-.2425	-.0513	-.0029	-.0346	-.0971	-.1147	-.1362	-.1009
30.000			.6211	.3410	-.0177	-.0895	-.1739	-.1479	.1714	.0004	-.2779	-.0667	-.0116	-.0458	-.0384
60.000			.8989	.4113	-.0405	-.0334	-.1347	-.0554	.3008	-.0400	-.2093	-.0809	.0315	.0247	.0074
90.000		1.2360	.6752	.3838	.0215	-.0530	-.1427	.1388	.6008		-.3378	-.2347	-.1902	-.2323	-.1907
120.000			.7502	.2946	-.0631	-.1310	-.2163	-.1410	.1809	-.2433	-.3687	-.3047	.1637	.2300	.1547
150.000			.6369	.1698	-.1465	-.2142	-.3012	-.2527	.0056	-.1843	.2108	-.1173	-.0899	.0569	.0656
180.000		1.1830	.4893	.0913	-.2167	-.2757	-.3506	-.3158	-.0816	.2667	.3831	.1625	-.2508	-.0237	.0332
270.000			.7800	.0533	-.2496	-.3029	-.3682	-.3158	.0225	.3758	.4611	-.1970	-.4229	-.0944	-.0118
X/LT	.7480	.8530	.9280												

ALMAQ( 8 ) = 4.200 BETA0 ( 2 ) = -8.090

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0430	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2200	1.0840	.6966	.2222	-.1118	-.1773	-.2549	-.2261	-.1351	.1362	.0011	-.0980	-.1198	-.1140	-.0904
30.000			.8075	.3205	-.0342	-.1066	-.1934	-.1567	.1705	.0355	-.1899	-.0689	-.0236	-.0480	-.0481
60.000			.8580	.3680	.0035	-.0695	-.1642	-.0872	.4287	-.0280	-.2065	-.0146	.0291	.0280	.0084
90.000		1.2180	.8262	.3428	-.0209	-.0941	-.1795	-.0433	.5923		-.3547	-.2136	-.0752	-.1485	-.1454
120.000			.7235	.2468	-.0951	-.1624	-.2417	-.1798	.1899	-.2358	-.3634	-.3121	.1077	.1759	.1002
150.000			.6247	.1537	-.1653	-.2288	-.3067	-.2615	.0346	-.0888	.2204	-.1502	-.1591	.0258	.0325
180.000		1.2200	.9482	.0926	-.2134	-.2743	-.3452	-.3031	-.0369	.3290	.4024	.1450	-.2670	-.0333	.0206
270.000			.8326	.0563	-.2405	-.2936	-.3566	-.3020	.0714	.3591	.4644	-.2130	-.3320	-.0930	-.0116
X/LT	.7480	.8530	.9280												

PHI

ARC11-715 IAL14 Q1+T12+S12N25+AT10 EXTERNAL TANK

(RB1733)

ALPHA D (8) = 4.200 BETA D (2) = -8.090

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7460 .0530 .9280

PMI

.000	-.0369	.0194	-.0064
30.000	-.0226	.0809	.0310
60.000	.0180	.1285	.0872
90.000	-.0662	-.1627	
120.000	.0367	.2130	.8900
135.000	.1074	.3900	.6101
150.000	.1225	.3978	.6561
165.000	.1384	.3992	.6556
180.000	.1366	.3291	.4703

ALPHA D (8) = 4.200 BETA D (3) = -5.990

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5040 .5580

PMI

.000	1.2480	1.1170	.7211	.2348	-.1000	-.1691	-.2455	-.2180	-.1658	.2049	.0354	-.0893	-.1262	-.0932	-.0587
30.000			.7956	.3021	-.0461	-.1186	-.1935	-.1715	.1630	.0804	-.1346	-.0691	-.0436	-.0470	-.0322
60.000			.6132	.3218	-.0377	-.1004	-.1967	-.1391	.4290	-.0124	-.1954	-.1277	.0227	.0137	.0055
90.000	1.1740		.7715	.2981	-.0804	-.1306	-.2152	-.1500	.5831		-.3701	-.2057	.0135	-.0431	-.0668
120.000			.6632	.2069	-.1230	-.1860	-.2661	-.2039	.1892	-.2315	-.3471	-.2923	.0779	.1335	.0523
135.000								-.2481		-.1077		-.1735		.1100	
150.000			.6046	.1375	-.1766	-.2334	-.3169	-.2639	.0555	.0944	.2159	-.1827	-.1957	.0154	.0022
165.000				.0921	-.2165	-.2756	-.3429	-.2982	.0893	.3507	.4118	.1033	-.2870	-.0241	.0051
180.000	1.2480	.9508	.5179	.3638	-.2348	-.2912	-.3536	-.2901	.0565	.3087	.4650	-.2306	-.3389	-.0671	-.0331
270.000		.8885													

K/LT .7460 .0530 .9280

PMI

.000	-.0187	.0074	.0519
30.000	-.0058	.0310	.0436
60.000	.0225	.1076	.0758
90.000	-.0222	.0311	
120.000	.0305	.1952	.7368
135.000	.0735	.3331	.5493
150.000	.0879	.3635	.6018
165.000	.1069	.3597	.6137
180.000	.1063	.3109	.4462

## ARC11-716 IAL14 01-T12-S12M25-AT10 EXTERNAL TANK

(R81733)

ALMAAD ( 8 ) = 4.220 BETAO ( 4 ) = -3.970

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0240	.1130	.1780	.1940	.2100	.2420	.2900	.3440	.3940	.4310	.5050	.5940	.6360
PHI															
.000	1.2670	1.1350	.7317	.2385	-.0907	-.1591	-.2382	-.2117	-.1518	.2455	.0757	-.0911	-.1273	-.0728	-.0334
30.000			.7707	.2766	-.0667	-.1345	-.2135	-.1819	.1764	.1250	-.0911	-.0746	-.0679	-.0485	-.0165
60.000			.7659	.2755	-.0659	-.1336	-.2263	-.1764	.4227	.0051	-.1809	-.1317	.0104	-.0028	-.0045
90.000	1.129		.7199	.2380	-.0983	-.1657	-.2455	-.1868	.5776		-.3931	-.2228	.0125	-.0344	-.0610
120.000			.6466	.1749	-.1488	-.2117	-.2889	-.2300	.1565	-.1995	-.3365	-.2996	.0446	.1015	.0174
150.000								-.2590		-.0327		-.2205		.0847	
180.000			.5900	.1220	-.1897	-.2469	-.3260	-.2754	.0323	.1560	.2039	-.1872	-.2072	.0165	-.0157
210.000				.0670	-.2155	-.2739	-.3424	-.2893	.1279	.3212	.3900	.0631	-.3198	.0024	-.0087
240.000	1.2670	.9599	.5230	.0523	-.2264	-.3011	-.3481	-.2437	.0494	.2459	.4395	-.1893	-.3460	-.0313	-.0340
270.000		.9451							.6090						

K/LT .7480 .6530 .9280

PHI

.000	.0059	.0221	.0487												
30.000	.0134	.0483	.0526												
60.000	.0187	.0951	.0914												
90.000	-.0043	.0642													
120.000	.0174	.1773	.6287												
150.000	.0335	.3148	.4790												
180.000	.0382	.3247	.5123												
210.000	.0869	.3267	.5476												
240.000	.0884	.2788	.4176												

ALMAAD ( 8 ) = 4.220 BETAO ( 5 ) = -2.000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1190	.1780	.1940	.2100	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6360
PHI															
.000	1.2800	1.1480	.7364	.2435	-.0891	-.1559	-.2330	-.2052	-.1431	.2571	.0886	-.0915	-.1216	-.0818	-.0220
30.000			.7906	.2539	-.0866	-.1495	-.2263	-.1954	.1266	.1676	-.0511	-.0844	-.0865	-.0393	-.0155
60.000			.7235	.2339	-.0891	-.1626	-.2505	-.2080	.3866	.0228	-.1636	-.1334	.0006	-.0142	-.0085
90.000	1.0870		.6728	.1934	-.1314	-.1971	-.2731	-.2099	.5743		-.4098	-.2408	-.0186	-.0510	-.0716
120.000			.6104	.1482	-.1736	-.2337	-.3035	-.2905	.2085	-.1458	-.3190	-.3024	.0185	.0750	-.0035
150.000								-.2676		.0104		-.2326		.0632	
180.000			.5885	.1048	-.1997	-.2565	-.3316	-.2791	.8025	.2237	.1802	-.1973	-.2281	.0219	-.0382
210.000				.0838	-.2168	-.2777	-.3417	-.3025	.0904	.2709	.3726	.0190	-.2282	.0102	-.0285
240.000	1.2800	.9994	.5281	.0884	-.2214	-.2803	-.3425	-.1995	.0713	.2113	.4296	-.1300	-.2801	.0110	-.0338
270.000		.9936							.5999						

K/LT .7480 .6530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

ARC11-716 IAI4 21-712-S12K28-A\*10 EXTERNAL TANK (RB1733)

ALPHA(0) = 4.220 BETA(0) = -2.002

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/L .740 .850 .920

PMI	0.000	.0143	.0308	.0564
30.000	.0149	.0460	.0696	
60.000	.0097	.0816	.1009	
90.000	-.0100	.0847		
120.000	.0107	.1826	.3083	
150.000	.0400	.2831	.4021	
180.000	.0321	.2901	.4054	
210.000	.0699	.2899	.3002	
240.000	.0699	.2506	.4023	

ALPHA(0) = 4.240 BETA(0) = -0.70

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/L .0000 .0080 .0490 .1190 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5360 .6360

PMI	0.000	1.2830	1.1480	.7390	.2459	-.0872	-.1590	-.2356	-.2063	-.1400	.2793	.0853	-.0971	-.1231	-.0366	-.0139
30.000				.7178	.2321	-.1031	-.1731	-.2469	-.2165	.1213	.1893	-.0318	-.1042	-.1019	-.0373	-.0126
60.000				.6755	.1919	-.1530	-.1952	-.2790	-.2425	.2110	.0485	-.1584	-.1139	-.0200	-.0390	-.0170
90.000			1.0380	.6183	.1535	-.1684	-.2302	-.3033	-.2317	.5735	-.4290	-.2190	-.0363	-.0646	-.0400	
120.000				.5680	.1063	-.2007	-.2600	-.3269	-.2765	.2447	-.1263	-.3003	-.2901	-.0106	.0474	-.0344
150.000				.5444	.0817	-.2173	-.2723	-.3467	-.2885	.1931	.0557	-.2788	-.2788		.0448	
180.000					.0711	-.2255	-.2792	-.3460	-.3081	.1181	.2449	.3600	-.0323	-.2989	-.0002	-.0443
210.000		1.2830	.9531	.5306	.0697	-.2234	-.2622	-.3475	-.2438	.0916	.2260	.3915	-.0299	-.2277	.0074	-.0285
240.000			1.0420							.5954						

K/L .740 .850 .920

PMI	0.000	.0127	.0293	.0470
30.000	.0127	.0369	.0603	
60.000	.0068	.0679	.1007	
90.000	.0080	.0750		
120.000	.0312	.1606	.3993	
150.000	.0351	.2394	.2913	
180.000	.0358	.2324	.2772	
210.000	.0742	.2428	.3252	
240.000	.0436	.2391	.2985	



(R81133)

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA( 8 ) = 4.220 BETA( 7 ) = 1.930

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2780	1.1450	.7348	.2456	-.0895	-.1578	-.2349	-.2022	-.1462	.3043	.0920	-.0981	-.1271	-.0516	-.0203
30.000			.6883	.2068	-.1224	-.1889	-.2630	-.2301	-.0740	.2624	-.0147	-.1258	-.1029	-.0576	-.0188
60.000			.6291	.1559	-.1625	-.2244	-.3046	-.2545	.2920	.0786	-.1463	-.0960	-.0343	-.0513	-.0271
90.000		.9920	.5728	.1101	-.1975	-.2568	-.3296	-.0895	.5922	-.4304	-.1713	-.0421	-.0745	.0751	
120.000			.5325	.0776	-.2230	-.2799	-.3426	-.2868	.2588	-.0957	-.2436	-.2477	-.0463	.0121	-.0490
135.000							-.2918			.1296		-.2705		.0128	
150.000			.5217	.0657	-.2268	-.2826	-.3565	-.2978	.1174	.2815	.1145	-.2553	-.2395	-.0347	-.1044
165.000			.0673	-.2279	-.2837	-.3504	-.3134		.1179	.2755	.3081	-.0486	-.2513	-.0141	-.0311
180.000	1.2780	.9545	.5284	.0675	-.2240	-.2816	-.3475	-.2528	.0990	.2533	.3995	-.0748	-.2120	.0033	-.0379
270.000		1.0900													

X/LT .7480 .8530 .9280

PHI

.000	.0107	.0290	.0590												
30.000	.0143	.0345	.0484												
60.000	.0174	.0542	.0819												
90.000	.0299	.0635													
120.000	.0682	.1692	.2883												
135.000	.0615	.2009	.1993												
150.000	.0557	.1905	.1684												
165.000	.0724	.2203	.3143												
180.000	.0713	.2395	.2623												

ALPHA( 8 ) = 4.430 BETA( 8 ) = 4.100

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2650	1.1300	.7267	.2410	-.0938	-.1624	-.2404	-.2093	-.1489	.2510	.0762	-.0889	-.1314	-.0815	-.0405
30.000			.6529	.1768	-.1450	-.2125	-.2854	-.2514	-.1426	.2819	-.0123	-.1419	-.1206	-.0822	-.0314
60.000			.5799	.1144	-.1954	-.2563	-.3300	-.2658	.3144	.1065	-.1341	-.1109	-.0529	-.0605	-.0269
90.000		.9-09	.5246	.0639	-.2287	-.2832	-.3537	-.1333	.6027	-.4213	-.1324	-.0311	-.0653	-.0653	
120.000			.4933	.0421	-.2479	-.3005	-.3586	-.3050	.2127	-.0721	-.2154	-.2432	-.0752	-.0139	-.0598
135.000							-.3115			.1638		-.2794		-.0311	
150.000			.4933	.0365	-.2471	-.2993	-.3709	-.3170	.0784	.2647	.1058	-.3387	-.2360	-.0802	-.1352
165.000			.0521	-.2400	-.2949	-.3628	-.3240	.0969	.2685	.2570	.2570	-.0545	-.2455	-.0288	-.0380
180.000	1.2650	.9315	.5238	.0599	-.2313	-.2883	-.3558	-.2725	.0826	.2306	.3915	-.1149	-.2271	-.0356	-.0493
270.000		1.1370													

X/LT .7480 .8530 .9280

PHI

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DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4703

ARC11-716 IA14 01+T12+S12Q5+AT10 EXTERNAL TANK

(RB1733)

ALPHA( 8) = 4.430 BETA( 8) = 4.100

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	.0033	.0192	.0560
30.000	.0132	.0299	.0514
60.000	.0145	.0484	.0824
90.000	.0391	.0622	
120.000	.0677	.1576	.2093
135.000	.0542	.1620	.1488
150.000	.0507	.1378	.0842
165.000	.0648	.1890	.2469
180.000	.0365	.2098	.2581

ALPHA( 8) = 4.410 BETA( 9) = 6.080

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5300 .6380

PHI

.000	1.2480	1.1180	.7214	.2359	-.0964	-.1662	-.2437	-.2176	-.1300	.1878	.0528	-.0807	-.1323	-.1021	-.0627
30.000			.6190	.1930	-.1665	-.2325	-.3022	-.2721	-.1172	.2591	-.0065	-.1496	-.1463	-.0942	-.0390
60.000			.5294	.0741	-.2247	-.2810	-.3449	-.2955	.2580	.1357	-.1154	-.1320	-.0722	-.0767	-.0262
90.000		.8012	.4755	.0265	-.2550	-.3085	-.3522	-.2038	.6018		-.4105	-.0951	-.0100	-.0684	-.0580
120.000			.4530	.0113	-.2670	-.3167	-.3581	-.2731	.1541	-.0490	-.2006	-.2738	-.0832	-.0431	-.0676
135.000							-.3027			.1834		-.2696		-.0671	
150.000			.4646	.0146	-.2614	-.3113	-.3813	-.2960	.0535	.2220	.0730	-.3635	-.2634	-.1042	-.1122
165.000				.0330	-.2484	-.3029	-.3719	-.3334	.0823	.2459	.2765	-.0644	-.1953	-.0290	-.0754
180.000	1.2480	.9367	.5117	.0509	-.2351	-.2912	-.3613	-.2929	.0820	.2078	.3629	-.1731	-.2647	-.0421	-.0840
270.000		1.1740							.5917						

X/LT .7460 .8530 .9280

PHI

.000	-.0130	.0032	.0629
30.000	.0009	.0360	.0598
60.000	.0061	.0763	.1066
90.000	.0352	.0922	
120.000	.0577	.1517	.2186
135.000	.0406	.1491	.1456
150.000	.0316	.1228	.0340
165.000	.0511	.1567	.2698
180.000	.0373	.1791	.3135

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ARC11-716 1A14 Q1+T12+S12N25+AT110 EXTERNAL TANK (RB1733)

ALPHA( 8) = 4.410 BETA( 10) = 8.150

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2180	1.0860	.6997	.2219	-.1055	-.1720	-.2538	-.2261	-.0786	.0909	.0105	-.0852	-.1358	-.1227	-.0899
30.000			.5717	.1125	-.1950	-.2556	-.3243	-.2969	.0071	.1885	-.0251	-.1646	-.1486	-.1127	-.0528
60.000			.4784	.0301	-.2525	-.3095	-.3377	-.3125	.1788	.1524	-.1027	-.1395	-.0928	-.0912	-.0371
90.000		.8355	.4287	-.0129	-.2824	-.3335	-.3481	-.1866	.5985		-.4111	-.0616	-.0495	-.0775	-.0426
120.000			.4126	-.0225	-.2878	-.3369	-.3816	-.1813	.1034	-.0175	-.1919	-.1675	-.1096	-.0695	-.0663
150.000								-.1216		.1737		-.2750		-.0932	
180.000			.4346	-.0116	-.2816	-.3287	-.3993	-.1468	.0442	.1911	.0504	-.4080	-.2391	-.1369	-.1121
210.000				.0153	-.2666	-.3205	-.3863	-.3348	.0626	.2061	.2585	-.1200	-.2399	-.0979	-.1248
240.000	1.2180	.8440	.5025	.0423	-.2469	-.3039	-.3736	-.2945	.0938	.1739	.2998	-.1990	-.2803	-.1562	-.1144
270.000		1.2190							.968						

X/LT .7460 .8530 .9280

PHI

.000	-.0188	.0202	.0098
30.000	.0359	.0254	.0384
60.000	.0245	.0421	.1074
90.000	.0333	.0892	
120.000	.0473	.1455	.2632
150.000	.0292	.1555	.1662
180.000	.0215	.1295	.0387
210.000	.0358	.1375	.2856
240.000	.0158	.1649	.2976

ALPHA( 8) = 4.390 BETA( 11) = 10.140

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	1.0480	.6743	.2055	-.1193	-.1866	-.2668	-.2438	-.0657	.0107	-.0435	-.0990	-.1419	-.1390	-.0908
30.000			.5253	.0768	-.2264	-.2850	-.3323	-.3295	.0703	.1509	-.0467	-.1714	-.1527	-.0890	-.0069
60.000			.4276	-.0106	-.2881	-.3397	-.3350	-.3034	.1052	.1445	-.0717	-.1203	-.1140	-.0489	-.0383
90.000		.7794	.3831	-.0481	-.3079	-.3523	-.3384	-.1708	.5796		-.3961	-.0173	-.0329	-.0181	-.0819
120.000			.3748	-.0322	-.3092	-.3572	-.4106	-.1018	.0627	.0245	-.1738	-.1280	-.0845	-.0572	-.1183
150.000								-.0966		.1211		-.2738		-.0837	
180.000			.4010	-.0365	-.3066	-.3503	-.4195	-.1018	.0151	.2078	.0346	-.4100	-.2128	-.1509	-.1653
210.000				-.0065	-.2830	-.3392	-.4075	-.1844	.0460	.1691	.2195	-.1701	-.2588	-.1380	-.1551
240.000	1.1830	.7799	.4910	.0312	-.2560	-.3143	-.3837	-.2976	.0637	.1416	.2322	-.1783	-.2330	-.2330	-.1734
270.000		1.2580							.6080						

X/LT .7460 .8530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 01+712+S12N25+AT10 EXTERNAL TANK (R81733)

ALPHA( 8 ) = 4.390 BETA( 11 ) = 10.140

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0514 -.0410 -.0423  
 30.000 -.0118 -.0092 .0122  
 60.000 -.0129 .0098 .1000  
 90.000 -.0014 .0726  
 120.000 .0249 .1282 .2438  
 135.000 .0036 .1348 .1433  
 150.000 .0002 .1008 .0067  
 165.000 -.0048 .1126 .2746  
 180.000 -.0400 .1011 .2477

ALPHA( 9 ) = 6.340 BETA( 1 ) = -9.960

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PHI  
 .000 1.1640 1.0850 .7261 .3901 -.0798 -.1328 -.2311 -.2061 -.0093 -.0163 -.0223 -.0392 -.1029 -.1129 -.1033  
 30.000 .8700 .3901 .0230 -.0425 -.1411 -.1103 .2173 .0472 -.2254 -.0388 -.0056 -.0103 -.0233  
 60.000 .9261 .4392 .0651 -.0104 -.1123 -.0324 .4745 .0063 -.1345 -.1178 .0389 .0648 .0843  
 90.000 1.2360 .8684 .3857 .0199 -.0371 -.1399 .2124 .5794 -.2960 -.1733 .0249 .0827 .0316  
 120.000 .7179 .2529 -.0895 -.1585 -.2385 -.1760 .1218 -.2916 -.3235 -.2424 .0609 .1582 .1991  
 135.000 .5841 .1233 -.1834 -.2472 -.3281 -.2824 -.0347 -.2437 .0995 -.1181 -.0836 .0475 .0822  
 150.000 .0466 -.2498 -.3059 -.3759 .3383 .1238 .2078 .3409 .1669 .2348 -.0220 .0355  
 180.000 1.1640 .8832 .4436 .0092 -.2776 -.3289 -.3845 -.3367 .4504 .1945 -.4063 -.0947 .0319  
 270.000 .7613 .5911

X/LT .7460 .8530 .9280

PHI  
 .000 -.0363 -.0340 -.0283  
 30.000 .0361 .0695 .0445  
 60.000 .0855 .1796 .0905  
 90.000 .0842 .0282  
 120.000 .1630 .2262 .8466  
 135.000 .2148 .4166 .6374  
 150.000 .1945 .4165 .6874  
 165.000 .1950 .3989 .7242  
 180.000 .1589 .3296 .5229

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AF011-715 1A14 01+Y12-S12N29+AT10 EXTERNAL TANK (R01733)

$$\text{ALPHA}(9) = 6.380 \quad \text{BETAC}(2) = -7.370$$

## SECTION : 1) EXTERNAL TANK

DEPENDENT VARIABLE CO

W/LT	.0000	.0050	.0100	.0150	.0200	.0250	.0300	.0350	.0400	.0450	.0500	.0550	.0600
741													
.000	1.2020	1.1280	.7522	.2713	-.0676	-.1385	-.2193	-.1929	-.1072	.1639	.0260	-.0662	-.0890
30.000		.6595	.3719	.0082	-.0665	-.1523	-.1201	-.1201	.2218	.0795	-.1382	-.0288	-.0150
60.000		.8833	.3970	.0277	-.0462	-.1443	-.0911	-.0911	.4787	.0232	-.1536	-.0358	.0014
90.000	1.1980	.8125	.3339	-.0260	-.0997	-.1822	.0267	.0267	.5657	-.3577	.1649	.0038	.0346
120.000		.6801	.2103	-.1234	-.1894	-.2863	.1135	.1135	-.3025	-.3331	-.2693	.0632	.0244
150.000						-.2705	-.2413		-.2413		.1322	.1322	.1277
180.000		.5702	.0886	-.2014	-.2520	-.3393	-.2913	-.3380	-.1813	.1539	-.1811	-.1275	.0594
210.000			.0462	-.2464	-.3062	-.3736	-.3243	-.3642	.2877	.3664	.1370	-.2722	.0589
240.000	1.2020	.8934	.4546	.0136	-.2720	-.3193	-.3762	-.3227	.0586	.3250	.4511	-.2167	-.0674
270.000		.8151							.5656			-.3300	.0234

1/27	.7460	.8530	.9280
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0.000	-0.066	0.034	0.0271
30.000	-0.072	0.765	0.695
60.000	0.002	0.113	0.090
90.000	0.614	0.008	
20.000	0.145	0.194	0.8100
35.000	0.169	0.367	0.6019
50.000	0.166	0.400	0.606
66.000	0.178	0.379	0.7022
80.000	0.1671	0.336	0.4934

$$\text{ALPHA}(9) = 5.960 \quad \text{BETA}(3) = -6.000$$

## SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

[illegible]

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DATE 08 JAN 72

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4709

ARC11-716 1A14 C1+T12+S12N25+AT10 EXTERNAL TANK

(R81733)

ALPHA( 9 ) = 5.980 BETA( 3 ) = -6.000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9285

PHI	0.000	-0.170	.0032	.0505
30.000	.0058	.0395	.0511	
60.000	.0364	.1202	.0721	
90.000	.0195	.0087		
120.000	.0809	.1964	.7464	
135.000	.1130	.3550	.5594	
150.000	.1215	.3731	.6041	
165.000	.1368	.3656	.6239	
180.000	.1319	.3175	.4537	

ALPHA( 9 ) = 5.980 BETA( 4 ) = -4.010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3940 .4510 .5050 .5580 .6390

PHI	0.000	1.2510	1.1720	.7737	.2814	-.0594	-.1302	-.2116	-.1855	-.1291	.2570	.0395	-.0705	-.0948	-.0537	-.0259
30.000				.8106	.3176	-.0357	-.1072	-.1891	-.1582	.1873	.1477	-.0573	-.0385	-.0414	-.0244	-.0131
60.000				.7874	.2982	-.0505	-.1191	-.2133	-.1707	.4487	.0446	-.1667	-.0689	.0218	.0045	-.0010
90.000			1.1130	.7122	.2339	-.1041	-.1710	-.2500	-.1512	.5553		-.3916	-.2111	.0058	-.0126	-.0462
120.000				.0150	.1504	-.1700	-.2323	-.3062	-.2560	.1318	-.2772	-.3560	-.2912	.0281	.1035	.0487
135.000				.5475	.0897	-.2170	-.2737	-.3475	-.2950	.0429	-.0812	.1555	-.2320	-.2129	.0262	.0068
165.000		1.2510	.9109	.4817	.0508	-.2430	-.2992	-.3631	-.3072	.1265	.3023	.3652	.0493	-.3261	.0034	.0210
270.000			.9254		.0284	-.2539	-.3048	-.3683	-.2193	.0301	.2370	.4339	-.1781	-.3515	-.0157	-.0106

X/LT .7460 .8530 .9280

PHI	0.000	.0055	.0313	.0570
30.000	.0254	.0594	.0638	
60.000	.0314	.1080	.0851	
90.000	.0192	.0568		
120.000	.0378	.1940	.6499	
135.000	.0865	.3307	.4950	
150.000	.0888	.3375	.5319	
165.000	.1153	.3362	.5615	
180.000	.1108	.2907	.4209	

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

(RB1133)

ALPHA( 9) = 6.010 BETA( 5) = -2.060

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	1.1840	.7799	.2670	-.0554	-.1247	-.2085	-.1789	-.1210	.2754	.1110	-.0700	-.0857	-.0343	-.0116
30.000			.7871	.2939	-.0526	-.1239	-.2065	-.1742	.1665	.1673	-.0150	-.0564	-.0501	-.0270	-.0098
60.000			.7429	.2497	-.0832	-.1485	-.2395	-.2020	.3217	.0654	-.1985	-.0537	.0033	-.0090	-.0087
90.000		1.0700	.6616	.1895	-.1387	-.2034	-.2797	-.1867	.5453		-.3954	-.2063	.0048	-.0194	-.0444
120.000			.5803	.1205	-.1940	-.2533	-.3237	-.2738	.1354	-.2125	-.3626	-.3072	-.0069	.0745	.0211
135.000								-.2891	-.0409			-.2663		.0706	
150.000			.5284	.0691	-.2282	-.2817	-.3528	-.2959	.1548	.1637	.1338	-.2281	-.2234	.0286	-.0204
165.000			.0491	-.2443	-.2975	-.3616	-.3122	.0693	.2495	.3407	.0071	-.2459	.0118	.0040	
180.000	1.2610	.9099	.4842	.0336	-.2487	-.3037	-.3634	-.1651	.0486	.1888	.4058	-.1214	-.2781	.0123	-.0103
270.000		.9750							.5717						
X/LT	.7460	.8530	.9280												

ALPHA( 9) = 6.020 BETA( 6) = .050

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2780	1.1880	.7821	.2888	-.0537	-.1238	-.2065	-.1745	-.1217	.3202	.1219	-.0754	-.0903	-.0270	-.0035
30.000			.7565	.2632	-.0736	-.1447	-.2234	-.1919	.0375	.2529	-.0025	-.0830	-.0640	-.0401	-.0079
60.000			.6920	.2072	-.1173	-.1853	-.2685	-.2249	.3760	.0875	-.1454	-.0484	-.0108	-.0280	-.0105
90.000		1.0200	.6120	.1451	-.1701	-.2334	-.3077	-.0860	.5515		-.3925	-.1656	-.0035	-.0188	-.0438
120.000			.5413	.0834	-.2151	-.2747	-.3406	-.2826	.1282	-.1817	-.3469	-.2830	-.0252	.0416	-.0067
135.000								-.2927	-.0087			-.3183		.0432	
150.000			.5077	.0526	-.2358	-.2913	-.3588	-.2974	.1554	.1992	.1201	-.2395	-.2385	.0020	-.0567
165.000			.0436	-.2468	-.2987	-.3616	-.3107	.0813	.2038	.3402	-.0243	-.2401	.0009	-.0111	
180.000	1.2680	.9105	.4867	.0359	-.2434	-.3010	-.3682	-.2403	.0777	.1963	.3713	.0022	-.2257	.0051	.0032
270.000		1.0290							.5621						
X/LT	.7460	.8530	.9280												

PHI



ARC11-716 1A14 0A+112+S12N5+AT10 EXTERNAL TANK

(RB1733)

ALPHA( 9 ) = 6.020 BETA( 6 ) = .030

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7460 .8330 .9280

PMI

.000 .0151 .0418 .0685  
 30.000 .0151 .0322 .0594  
 60.000 .0141 .0761 .0747  
 90.000 .0306 .0634  
 120.000 .0783 .2017 .3722  
 135.000 .0601 .2562 .2892  
 150.000 .0639 .2490 .2830  
 165.000 .0998 .2383 .3581  
 180.000 .1070 .2323 .3209

ALPHA( 9 ) = 6.010 BETA( 7 ) = 2.060

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5380

PMI

.000 1.2630 1.1850 .7796 .2876 -.0575 -.1295 -.2098 -.1758 -.1234 .3313 .1141 -.0739 -.0970 -.0320 -.0168  
 30.000 .7221 .2366 -.1005 -.1584 -.2452 -.2145 -.1098 .2945 .0078 -.1014 -.0905 -.0488 -.0264  
 60.000 .6393 .1656 -.1598 -.2185 -.2590 -.2350 .3713 .1189 -.1269 -.0943 -.0207 -.0347 -.0188  
 90.000 .9724 .5596 .1027 -.2067 -.2664 -.3369 -.2285 .5452 -.3885 -.1182 .0166 -.0188 -.0358  
 120.000 .5048 .0515 -.2407 -.2958 -.3585 -.3047 .1643 -.1612 -.3259 -.2681 -.0320 .0092 -.0239  
 135.000 .4853 .0352 -.2526 -.3053 -.3725 -.3059 .1145 .2540 .1165 -.2613 -.2370 -.0306 -.0711  
 150.000 .0319 -.2553 -.3048 -.3712 -.3273 .0974 .2594 .2998 -.0529 -.2443 -.0137 -.0034  
 165.000 1.2630 .9031 .4849 .0334 -.2530 -.3063 -.2642 .0774 .2355 .3761 -.0239 -.2268 -.0103 -.0039  
 180.000 1.0770 .5530

K/LT .7460 .8330 .9280

PMI

.000 .0127 .0407 .0688  
 30.000 .0143 .0462 .0599  
 60.000 .0215 .0605 .0708  
 90.000 .0477 .0630  
 120.000 .0682 .1914 .2782  
 135.000 .0922 .2146 .2044  
 150.000 .0712 .2044 .1942  
 165.000 .0964 .2350 .3524  
 180.000 .0937 .2322 .2951

ORIGINAL PAGE IS  
OF POOR QUALITY



(RB1733)

ARC11-716 1A14 OX+T12+S12N25+AT10 EXTERNAL TANK

ALPHA ( 9 ) = 5.990 BETA ( 9 ) = 4.050

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3420	.3940	.4510	.5050	.5580
PHI														
.000	1.2330	1.1660	.7561	.2804	-.0642	-.1350	-.2146	-.1839	-.1256	.2772	.0564	-.0717	-.0997	-.0380
30.000			.6829	.2037	-.1265	-.1916	-.2668	-.2380	-.1500	.3016	.0108	-.1141	-.1232	-.0742
60.000			.2909	.1267	-.1189	-.2495	-.3270	-.2609	.3387	.1403	-.0975	-.1235	-.0596	-.0326
90.000		.9271	.5160	.0805	-.2338	-.2923	-.3441	-.2465	.5565	-.3710	-.1834	.0201	-.0231	-.0243
120.000			.4716	.0249	-.2603	-.3112	-.3535	-.3126	.2078	-.1352	-.2825	-.2425	-.0343	-.0031
150.000								-.3196		.1346		-.2859		-.0168
180.000			.4638	.0148	-.2616	-.3130	-.3633	-.3178	.0627	.2467	.1080	-.3231	-.2215	-.0587
210.000				.0230	-.2611	-.3112	-.3750	-.3365	.0759	.2463	.2022	-.0589	-.2353	-.0173
240.000	1.2330	.9103	.4845	.0289	-.2530	-.3066	-.3722	-.2833	.0692	.2014	.3780	-.0010	-.2340	-.0173
		1.1200												-.0074
X/LT	.7460	.8530	.9280											

X/LT .7460 .8530 .9280

PHI

.000	.0079	.0305	.0695
30.000	.0126	.0362	.0648
60.000	.0245	.0546	.0923
90.000	.0384	.0886	
120.000	.0871	.1664	.2147
150.000	.0752	.1719	.1460
180.000	.0673	.1470	.0879
210.000	.0816	.1950	.2298
240.000	.0800	.2168	.2386

ALPHA ( 9 ) = 5.980 BETA ( 9 ) = 6.090

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3420	.3940	.4510	.5050	.5580
PHI														
.000	1.2320	1.1520	.7589	.2744	-.0631	-.1407	-.2222	-.1940	-.1133	.1977	.0717	-.0704	-.1036	-.0636
30.000			.6444	.1724	-.1524	-.2176	-.2906	-.2636	-.1525	.2800	.0101	-.1332	-.1376	-.1013
60.000			.3372	.0819	-.2247	-.2804	-.3448	-.2992	.2457	.1747	-.0829	-.1185	-.0947	-.0727
90.000		.8747	.4669	.0204	-.2658	-.3187	-.3193	-.2340	.5725	-.3697	-.2148	-.0005	-.0415	-.0337
120.000			.4313	-.0059	-.2832	-.3302	-.3373	-.3056	.1429	-.1064	-.2523	-.2137	-.0638	-.0436
150.000								-.3059		.1496		-.2742		-.0470
180.000			.4349	-.0059	-.2794	-.3292	-.3936	-.2638	.0402	.2244	.0764	-.3464	-.2072	-.0826
210.000				.0048	-.2684	-.3236	-.3673	-.3427	.0660	.2303	.2647	-.0759	-.1920	-.0246
240.000	1.2320	.8912	.4726	.0179	-.2607	-.3139	-.3796	-.3131	.0634	.1705	.3374	-.1277	-.2380	-.0227
		1.1600												-.0376
X/LT	.7460	.8530	.9280											

X/LT .7460 .8530 .9280

PHI



12C11-715 IAI4 0A+12+S12N23+AT10 EXTERNAL TANK

(RB1733)

ALPHA( 9) = 5.980 BETAD ( 9) = 6.000

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PHI

.000	-.0126	.0100	.0715
30.000	-.0100	.0274	.0795
60.000	.0138	.0842	.1361
90.000	.0341	.1272	.2220
120.000	.0756	.1531	.2220
135.000	.0601	.1631	.1481
150.000	.0546	.1361	.0437
165.000	.0671	.1704	.2783
180.000	.0632	.1904	.3139

ALPHA( 9) = 5.970 BETAD (10) = 6.160

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5380

PHI

.000	1.2050	1.1200	.7375	.2609	-.0763	-.1481	-.2266	-.2606	-.0348	.0690	.0290	-.0689	-.1033	-.0967	-.0683
30.000			.5972	.1355	-.1795	-.2408	-.3090	-.2655	-.1272	.2159	-.0055	-.1448	-.1457	-.1192	-.0815
60.000			.4845	.0375	-.2517	-.3069	-.3390	-.3167	.1696	.1934	-.0653	-.1207	-.1082	-.0925	-.0295
90.000		.6184	.4166	-.0150	-.2957	-.3371	-.3195	-.2159	.5759	.3761	-.2244	-.0362	-.0708	-.0421	
120.000			.3943	-.0374	-.2949	-.3409	-.3406	-.2261	.0839	-.0757	-.2313	-.1872	-.0904	-.0470	-.0478
135.000								-.1430		.1449		-.2792		-.0648	
150.000			.4062	-.0364	-.2939	-.3239	-.4034	-.1477	.0297	.1920	.0547	-.3891	-.2297	-.1110	-.1014
165.000				-.0766	-.2847	-.3365	-.3977	-.2653	.0499	.1902	.2454	-.1252	-.2452	-.0666	-.0776
180.000	1.2050	.6760	.4629	.0309	-.2191	-.3010	-.3897	-.2160	.0600	.1593	.2617	-.1849	-.2627	-.1125	-.0889
270.000		1.2060													

K/LT .7460 .8330 .9280

PHI

.000	-.0460	.0339	.0245
30.000	.0244	.0241	.0487
60.000	.0433	.0901	.1379
90.000	.0472	.1257	
120.000	.0710	.1627	.2510
135.000	.0547	.1692	.1667
150.000	.0404	.1434	.0515
165.000	.0594	.1581	.2968
180.000	.0425	.1737	.3364

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-716 IA14 06+112+512M25+AT10 EXTERNAL TANK (R91753)

ALPHA(10) = 5.950 BETAO (11) = -10.030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0050	.0100	.0150	.0200	.0250	.0300	.0350	.0400	.0450	.0500	.0550	.0600
PMI													
.000	1.1690	1.0800	.7144	.2458	-.0858	-.1576	-.2387	-.2161	-.0394	-.0029	-.0343	-.0768	-.1098
30.000			.5468	-.0952	-.2070	-.2686	-.3382	-.3172	.0716	.1709	-.0215	-.1465	-.1891
60.000			.4289	-.0025	-.2848	-.3387	-.3322	-.3325	.1221	.1639	-.0406	-.1177	-.1241
90.000		.7675	.0727	-.0523	-.3134	-.3410	-.3185	-.1818	.5557		-.3743	-.2049	-.0568
120.000			.3572	-.0534	-.3189	-.3587	-.3593	-.1565	.0632	-.0435	-.2130	-.1174	-.0738
150.000								-.0991		.1127	-.2842	-.0373	
180.000			.3765	-.0533	-.3154	-.3591	-.4224	-.1108	.0015	.1906	.0216	-.3851	-.1940
210.000								-.1352	.0300	.1529	.1953	-.1834	-.2100
240.000	1.1690	.7349	.4527	.0016	-.2766	-.3316	-.4008	-.3279	.0078	.1376	.1824	-.1779	-.2684
270.000		1.2440						.5882					

X/LT .7460 .8530 .9280

PMI

.000	-.0392	-.0363	-.0403
30.000	-.0366	-.0137	.0193
60.000	-.0085	.0226	.1242
90.000	-.0022	.1120	
120.000	.0465	.1457	.2270
150.000	.0364	.1478	.1401
180.000	.0239	.1099	.0100
210.000	.0247	.1325	.2792
240.000	-.0054	.1102	.2809

ALPHA(10) = 7.910 BETAO (11) = -10.030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0050	.0100	.0150	.0200	.0250	.0300	.0350	.0400	.0450	.0500	.0550	.0600
PMI													
.000	1.1490	1.1180	.7812	.2921	-.0579	-.1279	-.2112	-.1852	.0235	-.0412	-.0121	-.0150	-.0723
30.000			.9063	.4237	-.0508	-.0260	-.1167	-.0826	.2979	.0799	-.1955	-.0067	.0232
60.000			.9439	.4806	.0787	.0039	-.1094	-.0310	.5056	.0387	-.1228	-.0626	.0627
90.000		1.2210	.8553	.3797	.0119	-.0637	-.1336	.2519	.5555		-.3107	-.1802	-.0075
120.000			.6837	.2233	-.1103	-.1812	-.2618	-.1520	.0394	-.2422	-.3250	-.2212	.0088
150.000								-.2797		-.3068	-.1805		
180.000			.5407	.0888	-.2179	-.2759	-.3551	-.3116	-.1061	-.2875	.0286	-.1156	-.0895
210.000				.0119	-.2808	-.3340	-.4017	-.3569	-.1580	.1684	.2676	.1719	-.2168
240.000	1.1490	.8419	.4049	-.0240	-.3050	-.3539	-.3980	-.3593	-.0044	.3094	.4280	-.2017	-.4064
270.000		.7419						.4435					

X/LT .7460 .8530 .9280

PMI

ARC11-716 IAL14 OR+T12+S12+23+AT10 EXTERNAL TANK

(R01733)

ALPHA(10) = 7.910 BETA(1) = -10.030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PHI

.000	-.0363	-.0245	-.0090
30.000	.0901	.0665	.0671
60.000	.1066	.2092	.1466
90.000	.1616	.1693	
120.000	.2060	.2360	.7347
135.000	.2416	.4145	.6071
150.000	.2100	.4036	.6755
165.000	.1991	.3824	.7316
180.000	.1632	.3174	.5162

ALPHA(10) = 7.930 BETA(2) = -8.030

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0580 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.1610	1.1570	.7892	.3107	-.0422	-.1135	-.1970	-.1710	-.0651	.1606	.0362	-.0482	-.0634	-.0636	-.0647
30.000			.8925	.4070	.0367	-.0412	-.1285	-.0957	.2634	.1101	-.1079	.0001	.0166	.0040	.0034
60.000			.8969	.4132	.0434	-.0315	-.1348	-.0874	.5047	.0533	-.1437	-.0206	.0461	.0494	.0363
90.000		1.1750	.7985	.3246	-.0315	-.1038	-.1845	.0894	.5395		-.3521	-.1524	-.0146	.0600	.0933
120.000			.6455	.1619	-.1410	-.2102	-.2870	-.2163	.0473	-.2444	-.3430	-.2367	-.0031	.1026	.1204
135.000			.5271	.0778	-.2283	-.2873	-.3537	-.3169	.0320	-.1575	.0749	-.1706	-.1317	.0262	.0630
150.000				.0160	-.2720	-.3290	-.3950	-.3429	-.0500	.2549	.2336	.1406	-.2711	-.0406	.0646
165.000	1.1610	.8562	.4168	-.0150	-.0927	-.3405	-.1929	-.3460	.0404	.3111	.4350	-.2244	-.3317	-.0858	.0433
180.000		.7951							.5325						

K/LT .7460 .8330 .9280

PHI

.000	-.0554	.0510	.0370
30.000	.0140	.0961	.0940
60.000	.0682	.1720	.1380
90.000	.1335	.1255	
120.000	.1697	.2028	.7299
135.000	.2019	.3970	.5781
150.000	.1842	.3500	.0172
165.000	.1917	.2754	.0160
180.000	.1779	.3251	.4913

Or  
OF

ARC11-716 1A14 01+T12+S12M25+T110 EXTERNAL TANK (RB1733)

ALPHA(10) = 7.010 BETA( 3 ) = -5.970

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5590	.6380
PHI															
.000	1.2070	1.1080	.8065	.3227	-.0333	-.1054	-.1899	-.1600	-.1072	.2329	.0778	-.0440	-.0339	-.0398	-.0434
30.000			.8742	.3837	-.0168	-.0398	-.1461	-.1132	.2684	.1467	-.0639	-.0015	.0104	-.0025	-.0004
60.000			.8502	.3641	.0004	-.0692	-.1685	-.1306	.4902	.0685	-.1513	.0037	.0357	.0277	.0122
90.000		1.1370	.7467	.2730	-.0730	-.1433	-.2249	-.0286	.5300		-.3594	-.1505	-.0046	.0313	.0422
120.000			.6077	.1476	-.1733	-.2344	-.3072	-.2567	.0496	-.2778	-.3467	-.2491	.0127	.1011	.0941
150.000							-.3095			-.2611		-.2486		.1021	
180.000			.5127	.0672	-.2337	-.2980	-.3682	-.3195	-.0667	.0406	.1124	-.2298	-.1625	.0236	.0419
210.000				.0124	-.2718	-.3268	-.3876	-.3307	.0775	.2935	.3450	.0949	-.3058	-.0188	.0361
240.000	1.2070	.8556	.4303	-.0393	-.2868	-.3350	-.3856	-.3168	.0458	.2802	.4180	-.2204	-.3522	-.0203	.0226
270.000		.8902							.5303						

K/LT .7480 .8530 .9280

## PHI

.000	-.0244	.0229	.0623												
30.000		.0122	.0810	.0685											
60.000		.0487	.1454	.0973											
90.000		.0840	.0784												
120.000		.1308	.1958	.6991											
150.000		.1528	.3659	.3456											
180.000		.1480	.3700	.5940											
210.000		.1641	.3679	.6313											
240.000		.1517	.3210	.4617											

ALPHA(10) = 7.030 BETA( 4 ) = -4.000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5590	.6380
PHI															
.000	1.2250	1.2080	.8193	.3305	-.0246	-.0968	-.1826	-.1526	-.0981	.2693	.1137	-.0408	-.0480	-.0288	-.0218
30.000			.8484	.3596	-.0231	-.0778	-.1622	-.1309	.2149	.1890	-.0267	-.0091	.0087	-.0030	-.0035
60.000			.8028	.3176	-.0358	-.1037	-.1999	-.1633	.4470	.0825	-.1464	.0190	.0337	.0188	-.0037
90.000		1.0880	.5975	.2254	-.1263	-.1778	-.2596	-.1177	.5207		-.3616	-.1313	-.0071	.0162	.0056
120.000			.5775	.1201	-.1943	-.2541	-.3246	-.2842	.0584	-.2977	-.3623	-.2521	.0043	.0874	.0888
150.000							-.3096			-.1310		-.2980		.0874	
180.000			.5007	.0511	-.2470	-.3004	-.3698	-.3165	.0017	.0925	.0961	-.2617	-.2051	.0262	.0234
210.000				.0130	-.2701	-.3240	-.3809	-.3222	.1204	.2778	.3371	.0384	-.3262	-.0011	.0310
240.000	1.2250	.8610	.4376	-.0246	-.2770	-.3296	-.3866	-.1839	.0210	.2228	.3967	-.1734	-.3468	-.0115	.0107
270.000		.9030							.5355						

K/LT .7480 .8530 .9280

## PHI

.000															
30.000															
60.000															
90.000															
120.000															
150.000															
180.000															
210.000															
240.000															
270.000															



AGC1:-7:6 1A14 M+T12+S12\*25+AT10 EXTERNAL TANK

(RB1733)

$$A_{-} \text{MAC}(10) = 7.032 \quad \text{MAC}(4) = -4.032$$

## SECTION 11: EXTERNAL TASKS

[illegible]

$\chi^2_{\text{min}} = 7.092$        $\text{BETAC}(5) = -2.730$

## SECTION (1) EXTERNAL TANK

[illegible][illegible]

(RB1733)

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

ALPHA(10) = 7.840 BETA( 6) = .040

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	1.2270	.8294	.3383	-.0167	-.0913	-.1760	-.1442	-.0912	.3494	.1458	-.0440	-.0332	-.0035	.0037
30.000			.7911	.3038	-.0455	-.1170	-.1984	-.1677	.0310	.2797	.0279	-.0521	-.0417	-.0201	-.0028
60.000			.7051	.2237	-.1083	-.1740	-.2603	-.1969	.4545	.1260	-.1183	-.0375	-.0017	-.0074	-.0048
90.000		1.0010	.5978	.1365	-.1755	-.2429	-.3157	-.1957	.5151	-.3434	-.1175	.0192	.0161	-.0048	
120.000			.3102	.0613	-.2360	-.2930	-.3565	-.2991	.0950	-.2007	-.3517	-.2489	-.0250	.0414	.0125
135.000								-.3146		-.0490		-.3206		.0463	
150.000			.4696	.0193	-.2597	-.3119	-.3741	-.3198	.1305	.1722	.1151	-.2700	-.2207	.0143	-.0369
165.000				.0124	-.2704	-.3185	-.3819	-.2906	.0530	.1932	.3130	-.0268	-.2194	.0591	.0137
180.000	1.2470	.8611	.4443	.0017	-.2681	-.3220	-.3811	-.1873	.0553	.1949	.3517	.0127	-.2187	.0119	.0238
270.000	1.0060							.5315							

X/LT .7460 .8530 .9280

PHI

.000	.0207	.0560	.0901
30.000	.0212	.0692	.0793
60.000	.0295	.0894	.0803
90.000	.0522	.0715	
120.000	.0984	.2205	.3568
135.000	.0968	.2619	.2909
150.000	.0777	.2490	.2916
165.000	.1163	.2650	.3886
180.000	.1227	.2598	.3359

ALPHA(10) = 7.650 BETA( 7) = 2.040

## SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2420	1.2190	.8236	.3345	-.0221	-.0949	-.1774	-.1463	-.0975	.3525	.1407	-.0430	-.0561	-.0036	-.0085
30.000			.7543	.2688	-.0722	-.1424	-.2206	-.1930	-.1198	.3191	.0342	-.0749	-.0718	-.0404	-.0322
60.000			.6482	.1752	-.1473	-.2099	-.2914	-.2210	.4206	.1529	-.0961	-.0566	-.0474	-.0270	-.0085
90.000		.9472	.5466	.0947	-.2147	-.2735	-.3326	-.2099	.5187	-.3490	-.2879	.0071	.0071	-.0064	-.0012
120.000			.4757	.0900	-.2569	-.3110	-.3552	-.3209	.1277	-.1668	-.3325	-.2470	-.0249	.0299	.0037
135.000								-.3277		.0428		-.3287		.0288	
150.000			.4493	.0075	-.2707	-.3213	-.3799	-.3267	.1171	.2388	.1083	-.2693	-.2148	-.0293	-.0374
165.000				.0005	-.2750	-.3220	-.3840	-.3365	.0832	.2438	.2803	-.0600	-.2177	.0065	.0190
180.000	1.2420	.8567	.4423	.0015	-.2737	-.3228	-.3835	-.2462	.0365	.2109	.3588	.0001	-.2242	.0053	.0237
270.000	1.0530								.5310						

X/LT .7460 .8530 .9280

PHI

.000	.0207	.0560	.0901
30.000	.0212	.0692	.0793
60.000	.0295	.0894	.0803
90.000	.0522	.0715	
120.000	.0984	.2205	.3568
135.000	.0968	.2619	.2909
150.000	.0777	.2490	.2916
165.000	.1163	.2650	.3886
180.000	.1227	.2598	.3359



ARC:11-716 1A14 C: T12+S:2N25+A71D EXTERNAL TANK

(R81733)

ALPHA(10) = 7.630 BETA(7) = 2.340

SECTION (1) EXTERNAL TANK

$X/\tau$	$\tau_{400}$	$\tau_{500}$	$\tau_{600}$	$\tau_{700}$	$\tau_{800}$	$\tau_{900}$	$\tau_{1000}$
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31.000	0.009	0.009	0.010	0.011	0.012	0.013	0.014
50.000	0.036	0.036	0.037	0.038	0.039	0.040	0.041
90.000	0.079	0.079	0.080	0.081	0.082	0.083	0.084
120.000	0.102	0.102	0.103	0.104	0.105	0.106	0.107
135.000	0.101	0.101	0.102	0.103	0.104	0.105	0.106
150.000	0.082	0.082	0.083	0.084	0.085	0.086	0.087
165.000	0.173	0.173	0.174	0.175	0.176	0.177	0.178
180.000	0.198	0.198	0.199	0.200	0.201	0.202	0.203

$$\text{ALPHA}(\text{IO}) = 7.870 \quad \text{BETA}(\text{B}) = 4.060$$

SECTION ( ) EXTERNAL TAX

W/LT	.0000	.0083	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
741															
.0000	1.2310	1.2075	.8159	.3270	-.0272	-.0986	-.1826	-.1544	-.1003	.2993	.1201	-.0407	-.0525	-.0802	-.0263
.30.0000			.7159	.2372	-.0962	-.1672	-.2439	-.2182	-.1591	.3240	.0390	-.0884	-.0842	-.0653	-.0328
.60.0000			.5994	.1326	-.1818	-.2426	-.3225	-.2538	.3579	.1837	-.0781	-.0564	-.0761	-.0386	-.0150
.90.0000		.9000	.4935	.0535	-.2451	-.3026	-.3402	-.3026	.5209		-.3588	-.3794	-.0059	-.0150	-.0046
120.0000			.4404	-.0007	-.2771	-.3287	-.3448	-.3257	.1562	-.1727	-.3505	-.2282	-.0378	.0144	-.0038
150.0000								-.3375		.1064		-.3307		-.0002	
180.0000			.4268	-.0131	-.2671	-.3307	-.3467	-.3277	.0500	.2412	.0830	-.2147	-.1954	-.0359	-.0605
210.0000				-.0173	-.2510	-.3267	-.3430	-.3272	.0553	.2466	.2581	-.0779	-.2069	.0037	.0312
240.0000	1.2310	.8553	.4404	-.0007	-.2771	-.3287	-.3448	-.3257	.1562	.1812	.4643	.0127	-.2081	.0037	.0211
270.0000		1.2075							.1591	.3579					

$\chi^2_{\text{dof}}$	.7460	.8593	.9282
amt			
1000	.0011	.0410	.0591
30,000	.0014	.0397	.0779
60,000	.0281	.0582	.1227
90,000	.0792	.1279	
120,000	.1300	.1759	.2233
150,000	.0926	.1227	.1447
180,000	.0826	.1137	.0847
195,000	.0361	.2000	.2196
200,000	.0314	.2162	.2336



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R51733)

ARC11-715 1A14 01+112+512+25+AT10 EXTERNAL TANK

ALPHA(10) = 7.970 BETA( 9) = 6.160

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2080	1.1920	.8102	.3273	-.0244	-.1014	-.1836	-.1570	-.0838	.2039	.0983	-.0388	-.0589	-.0404	-.0403
30.000			.6773	.2071	-.1254	-.1917	-.2663	-.2423	-.1780	.3062	.0410	-.0998	-.0972	-.0867	-.0757
60.000			.5424	.0884	-.2175	-.2754	-.3490	-.2857	.2698	.2132	-.0469	-.0608	-.0920	-.0490	-.0288
90.000		.8459	.4467	.0378	-.2744	-.3272	-.3355	-.2133	.5309		-.3632	-.4089	-.0168	-.0395	-.0259
120.000			.4018	-.0290	-.2941	-.3431	-.3345	-.3013	.1170	-.1755	-.3299	-.2022	-.0522	-.0145	-.0210
135.000								-.2943		.1301		-.2930		-.0299	
150.000			.3966	-.0358	-.2946	-.3426	-.4043	-.2182	.0249	.2140	.0715	-.3414	-.1875	-.0609	-.0682
165.000				-.0241	-.2905	-.3408	-.4007	-.2821	.0410	.2306	.2585	-.0688	-.1891	-.0095	-.0173
180.000	1.2080	.8317	.4250	-.0180	-.2841	-.3346	-.3981	-.3366	.0376	.1562	.3166	-.1187	-.2226	-.0189	-.0322
270.000		1.1400							.5357						
X/LT	.7460	.6530	.9280												

ALPHA(10) = 7.980 BETA( 10) = 8.110

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1790	1.1580	.7876	.3101	-.0394	-.1120	-.1969	-.1668	-.0124	.0307	.0499	-.0393	-.0667	-.0628	-.0680
30.000			.6250	.1640	-.1559	-.2204	-.2923	-.2895	-.1803	.2490	.0308	-.1082	-.1067	-.1124	-.1044
60.000			.4823	.0406	-.2510	-.3070	-.3470	-.2944	.1900	.2020	-.0340	-.0803	-.0999	-.0636	-.0428
90.000		.7915	.3999	-.0358	-.2986	-.3466	-.3221	-.2332	.5224		-.3701	-.3941	-.0589	-.0735	-.0339
120.000			.3656	-.0612	-.3111	-.3539	-.3351	-.2303	.0525	-.1461	-.3103	-.1589	-.0819	-.0272	-.0254
135.000								-.1710		.1249		-.2948		-.0454	
150.000			.3700	-.0391	-.3096	-.3534	-.4133	-.1399	.0241	.1919	.0448	-.3745	-.2091	-.0888	-.0826
165.000				-.0448	-.3065	-.3534	-.4123	-.1908	.0282	.1823	.2325	-.1464	-.1877	-.0711	-.0480
180.000	1.1790	.7389	.4164	-.0287	-.2938	-.3473	-.4110	-.3327	.0393	.1461	.2229	-.1754	-.2151	-.0849	-.0628
270.000		1.1820							.5461						
X/LT	.7460	.6530	.9280												

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK

(R81733)

ALPHAQ(10) = 7.980 BETAQ (10) = 8.110

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI	.000	-.0631	.0483	.0460
30.000	-.0160	.0333	.0626	
60.000	.0538	.0680	.1326	
90.000	.0677	.1430		
120.000	.0871	.1754	.2429	
135.000	.0729	.1817	.1645	
150.000	.0564	.1508	.0556	
165.000	.0800	.1713	.2968	
180.000	.0636	.1780	.3012	

ALPHAQ(10) = 7.980 BETAQ (11) = 10.230

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PHI	.000	1.1470	1.1220	.7619	.2964	-.0479	-.1222	-.2097	-.1815	-.0014	-.0245	-.0128	-.0437	-.0749	-.0827	-.0736
30.000				.5767	.1255	-.1898	-.2510	-.3250	-.3037	.0712	.1934	.0121	-.1037	-.1189	-.1223	-.0444
60.000				.4324	-.0027	-.2889	-.3442	-.3355	-.2902	.0945	.1680	-.0245	-.0929	-.1344	-.0770	-.0182
90.000			.7396	.3568	-.0691	-.3278	-.3470	-.3279	-.2195	.4999		-.3686	-.3268	-.0704	-.0564	-.0880
120.000				.3324	-.0852	-.3329	-.3647	-.3539	-.1901	.0362	-.1110	-.2869	-.0943	-.0523	-.0274	-.0723
135.000								-.1155		.1081			-.3019		-.0428	
150.000				.3475	-.0793	-.3319	-.3739	-.4714	-.1243	-.0016	.1859	.0163	-.3802	-.1506	-.0929	-.0929
165.000					-.0648	-.3214	-.3719	-.4338	-.1298	.0163	.1258	.1763	-.1897	-.1121	-.0807	-.0969
180.000	1.1470	.6821	.4081	-.0382	-.3058	-.3606	-.4231	-.3584	.0144	.1132	.1581	-.1871	-.2180	-.1734	-.1063	
270.000		1.2250								.5616						

X/LT .7480 .8530 .9280

PHI	.000	-.0436	-.0339	-.0044
30.000	-.0532	-.0180	.0356	
60.000	-.0084	.0406	.1163	
90.000	.0179	.1228		
120.000	.0578	.1543	.2136	
135.000	.0487	.1556	.1379	
150.000	.0346	.1226	.0164	
165.000	.0421	.1395	.2748	
180.000	.0143	.1140	.2568	

ARC11-716 1A14 2+12+512M25+AT10 EXTERNAL TANK (R81733)

ALPHA(11) = 9.890 BETA( 1 ) = -9.960

## SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	1.1530	.8119	.3425	-.0165	-.0885	-.1727	-.1461	.0682	-.0079	.0191	.0053	-.0282	-.0412	-.0418
30.000			.9551	.4748	.0935	.0145	-.0778	-.0431	.3079	.1236	-.1382	.0443	.0642	.0446	.0423
60.000			.9661	.4839	.1001	.0277	-.0809	.0158	.5433	.0826	-.0985	.0107	.0880	.0913	.0924
90.000		1.1680	.8379	.3695	.0042	-.0707	-.1316	.2984	.8232		-.3092	-.1324	-.0232	.0493	.1259
120.000			.6368	.1844	-.1432	-.2079	-.2861	-.1018	-.0198	-.1833	-.3462	-.2450	-.0412	.0640	.1112
135.000								-.3159		-.2962		-.2066		.1398	
150.000			.4839	.0433	-.2484	-.3090	-.3837	-.3441	-.1742	-.2701	-.1298	-.1789	-.0873	.0738	.0978
165.000				-.0295	-.3110	-.3611	-.4235	-.3725	-.1705	.1195	.1995	.1668	-.1953	.0408	.1030
180.000	1.1140	.7877	.3605	-.0610	-.3255	-.3748	-.3922	-.3795	-.0279	.2653	.3899	-.2027	-.3988	-.0907	.0489
270.000		.7115													.3716
X/LT	.7460	.8330	.9280												

ALPHA(11) = 9.930 BETA( 2 ) = -7.920

## SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	1.1920	.8348	.3599	.0009	-.0726	-.1583	-.1312	.0127	.1515	.0683	-.0064	-.0090	-.0235	-.0388
30.000			.9374	.4546	.0789	.0004	-.0908	-.0560	.3163	.1500	-.0685	.0470	.0614	.0369	.0389
60.000			.9148	.4361	.0652	-.0104	-.1141	-.0697	.5362	.0985	-.1235	.0501	.0792	.0788	.0721
90.000		1.1480	.7808	.3151	-.0388	-.1111	-.1932	.1408	.5068		-.3224	-.1142	-.0183	.0492	.1056
120.000			.6020	.1456	-.1715	-.2352	-.3093	-.2005	-.0309	-.1972	-.3542	-.2556	-.0394	.0823	.0976
135.000								-.3274		-.2880		-.2056		.1108	
150.000			.4772	.0324	-.2598	-.3147	-.3894	-.3439	-.1490	-.1263	-.0100	-.2239	-.1043	.0477	.0755
165.000				-.0256	-.2997	-.3527	-.4098	-.3623	-.0904	.2183	.2831	.1300	-.2632	-.0025	.0814
180.000	1.1300	.7993	.3743	-.0495	-.3157	-.3596	-.3855	-.3659	.0134	.2935	.4043	-.2291	-.3255	-.0431	.0533
270.000		.7646													.4912
X/LT	.7460	.8330	.9280												

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 3A+T12+S12M25+AT10 EXTERNAL TANK (881733)

ALPHA(11) = 9.930 BETA( 2) = -7.920

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	7460	8330	9280
741			
.000	-.0447	.0797	.0631
30.000	.0433	.0913	.1192
60.000	.0917	.1686	.1433
90.000	.1687	.1712	
120.000	.1744	.2156	.6141
135.000	.2143	.3946	.5627
150.000	.1975	.3765	.6149
165.000	.2014	.3660	.5885
180.000	.1820	.3133	.4833

ALPHA(11) = 9.940 BETA( 3) = -6.010

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580
741														
.000	1.1730	1.2270	.8591	.3755	.0068	-.0643	-.1506	-.1224	-.0640	.2422	.1042	-.0092	.0003	-.0128
30.000			.9803	.4344	.0589	-.0203	-.1100	-.0766	.3185	.1792	-.0185	.0352	.0455	.0310
60.000			.8681	.3889	.0224	-.0903	-.1503	-.1126	.5169	.1140	-.1248	.0553	.0651	.0337
90.000		1.0990	.7275	.2650	-.0813	-.1484	-.2345	.0312	.4960		.3249	-.0900	-.0077	.0811
120.000			.5532	.1128	-.1979	-.2564	-.3311	-.2629	-.0330	-.2033	-.3533	-.2506	-.0477	.0816
135.000			.4574	.0217	-.2662	-.3248	-.3947	-.3441	-.1227	-.2512	-.2623	-.2566	-.1896	.0493
150.000				-.0299	-.3008	-.3321	-.3944	-.3557	.0219	.2728	.2857	.0886	-.2845	.0697
165.000	1.1730	.7993	.3601	-.0472	-.3123	-.3547	-.3867	-.3356	.0780	.2672	.3909	-.2172	-.3432	.0362
180.000		.8170												

X/LT 7460 8330 9280

741			
.000	-.0234	.0387	.0698
30.000	.0398	.0913	.0843
60.000	.0708	.1406	.0990
90.000	.1180	.0815	
120.000	.1466	.2095	.6330
135.000	.1740	.3726	.5354
150.000	.1636	.3619	.5821
165.000	.1755	.3615	.6268
180.000	.1621	.3184	.4496

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4724

ARC11-716 IA14 06+112+S12N5+AT10 EXTERNAL TANK (881733)

ALPHA(11) = 9.690 BETA( 4) = -3.990

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6180
PHI															
.000	1.1940	1.2410	.8644	.3802	.0116	-.0587	-.1471	-.1201	-.0672	.2928	.1396	-.0066	-.0134	.0019	-.0030
30.000			.8906	.4018	.0321	-.0444	-.1301	-.0986	.2830	.2211	.0111	.0191	.0274	.0199	.0166
60.000			.8201	.3206	-.0198	-.0876	-.1854	-.1368	.5161	.1228	-.1204	.0251	.0439	.0390	.0372
90.000		1.0380	.6833	.2164	-.1181	-.1837	-.2663	-.0420	.4932		-.3253	-.1387	-.0469	.0336	.0506
120.000			.5384	.0898	-.2170	-.2762	-.3435	-.2983	-.0167	-.2002	-.3493	-.2586	-.0240	.0643	.0697
150.000							-.3361		-.1037		-.3162			.0689	
180.000			-.546	.0178	-.2695	-.3247	-.3916	-.3366	-.0457	.1264	.0332	-.2857	-.1806	.0194	.0274
210.000	1.1940	.8096	.3952	-.0233	-.2937	-.3455	-.3761	-.3474	.0900	.2808	.3018	.0302	-.3060	.0014	.0646
270.000		.8682		-.0381	-.2935	-.3483	-.3975	-.1598	.0000	.2501	.3655	-.1705	-.3383	-.0097	.0225
K/LT	.7480	.8930	.9280							.3440	.3940	.4510	.5090	.5580	.6180

PHI

.000	-.0025	.0328	.0925												
30.000	.0465	.0912	.1091												
60.000	.0669	.1289	.1164												
90.000	.0901	.1135													
120.000	.1195	.2206	.5804												
150.000	.1371	.3379	.4750												
180.000	.1227	.3399	.4993												
210.000	.1481	.3415	.5613												
270.000	.1413	.2989	.4350												

ALPHA(11) = 9.900 BETA( 5) = -1.980

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6180
PHI															
.000	1.2080	1.2560	.8771	.3877	.0221	-.0538	-.1417	-.1114	-.0622	.3319	.1637	-.0010	.0001	.0074	.0080
30.000			.8681	.3769	.0121	-.0642	-.1478	-.1176	.1721	.2772	.0407	.0050	.0077	.0081	.0055
60.000			.7676	.2893	-.0592	-.1275	-.2173	-.1430	.5295	.1402	-.0993	.0148	.0015	.0157	.0184
90.000		1.0140	.6297	.1669	-.1373	-.2195	-.2990	-.0100	.4877		-.3316	-.3095	-.1199	-.0136	.0334
120.000			.5042	.0599	-.2376	-.2963	-.3824	-.3155	-.0066	-.1517	-.3355	-.2824	-.0375	.0507	.0472
150.000							-.3404		-.0170		-.3578			.0716	
180.000			.4395	-.0617	-.2790	-.3313	-.3824	-.3331	.0651	.1801	.0363	-.3011	-.1766	.0368	.0113
210.000	1.2080	.8078	.3959	-.0238	-.2933	-.3446	-.3738	-.3306	.0640	.2277	.2930	-.0303	-.2470	.0233	.0433
270.000		.9189		-.0363	-.2935	-.3430	-.4000	-.0680	.0220	.1864	.3591	-.0895	-.2272	.0231	.0327
K/LT	.7480	.8930	.9280												

PHI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OR+T12+S12N25+AT10 EXTERNAL TANK (R81T33)

ALPHA2(11) = 9.900 BETA2 ( 5 ) = -1.990

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

.000 .0128 .0613 .1129  
30.000 .0299 .0765 .1384  
60.000 .0472 .1112 .1692  
90.000 .0677 .1529 .2029  
120.000 .1053 .2200 .4214  
135.000 .1182 .2787 .3540  
150.000 .0998 .2769 .3515  
165.000 .1327 .2872 .5057  
180.000 .1252 .2475 .4057

ALPHA2(11) = 9.910 BETA2 ( 6 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

.000 1.2130 1.2590 .6776 .3887 .0238 -.0530 -.1393 -.1094 -.0806 .3706 .1716 -.0007 -.0005 .0225 .0106  
30.000 .8305 .3442 -.0124 -.0845 -.1695 -.1407 .0075 .3110 .0503 -.0108 -.0136 -.0074  
60.000 .7128 .2379 -.0972 -.1626 -.2520 -.1843 .5039 .1655 -.0792 .0111 -.0224 .0037 .0024  
90.000 .5777 .1218 -.1903 -.2532 -.3267 -.0684 .4827 -.3383 -.3558 -.0828 -.0146 .0166  
120.000 .4706 .0309 -.2591 -.3129 -.3672 -.3290 .0119 -.0875 -.3406 -.2758 -.0294 .0385 .0315  
135.000 .4230 -.0134 -.2862 -.3342 -.3695 -.3292 .0918 .2134 .0619 -.2858 -.1834 .0292 -.0041  
150.000 .40269 -.0269 -.2885 -.3395 -.3987 -.2517 .0263 .2116 .2971 -.0438 -.2079 .0238 .0429  
165.000 1.2130 .8050 .3972 -.0340 -.2895 -.3413 -.3972 -.1229 .0320 .1948 .3350 -.0095 -.2172 .0305 .0514  
180.000 .9737 .4870

X/LT .7460 .8330 .9280

PHI

.000 .0096 .0605 .1116  
30.000 .0148 .0680 .1251  
60.000 .0388 .0982 .1612  
90.000 .0891 .1785  
120.000 .1030 .1961 .3162  
135.000 .1131 .2475 .2547  
150.000 .0918 .2330 .2738  
165.000 .1315 .2526 .3949  
180.000 .1359 .2485 .3091

(R81735)

ARC11-716 1A14 01\*112\*512N25\*AT10 EXTERNAL TANK

ALPHA0(11) = 9.900 BETA0 ( 7 ) = 2.040

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2090	1.2550	.8726	.3833	.0175	-.0379	-.1435	-.1126	-.0661	.3619	.1618	-.0071	-.0025	.0130	.0088
30.000			.7892	.3094	-.0427	-.1161	-.1971	-.1679	-.1142	.3371	.0612	-.0362	-.0287	-.0271	-.0294
60.000			.6559	.1877	-.1389	-.2047	-.2884	-.2173	.4330	.1919	-.0563	-.0033	-.0375	-.0059	-.0188
90.000		.9138	.5274	-.0796	-.2271	-.2850	-.3564	-.0919	.4817		-.3401	-.3954	-.0318	-.0201	.0021
120.000			.4369	.0013	-.2789	-.3304	-.3740	-.3388	.0297	-.0662	-.3503	-.2637	-.0347	.0305	.0199
135.000								-.3460		.0960		-.3725		.0467	
150.000			.4062	-.0289	-.2941	-.3416	-.3807	-.3490	.1022	.2582	.0601	-.2817	-.1982	.0034	-.0095
165.000				-.0330	-.2956	-.3424	-.4006	-.3354	.0650	.2409	.2590	-.0819	-.1961	.0248	.0418
180.000	1.2090	.8039	.3964	-.0363	-.2954	-.3421	-.4021	-.1873	.0400	.2072	.3351	-.0446	-.2272	.0240	.0496
270.000		1.0200							.4963						
K/LT	.7460	.8530	.9280												

ALPHA0(11) = 9.900 BETA0 ( 8 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2010	1.2430	.8616	.3757	.0112	-.0619	-.1510	-.1179	-.0668	.3149	.1459	-.0075	-.0096	.0047	-.0116
30.000			.7406	.2737	-.0709	-.1414	-.2213	-.1961	-.1484	.3375	.0639	-.0488	-.0492	-.0344	-.0487
60.000			.6041	.1414	-.1755	-.2373	-.3186	-.2486	.3790	.2169	-.0247	-.0183	-.0370	-.0177	-.0222
90.000		.8748	.4826	.0384	-.2565	-.3142	-.3765	-.1367	.4764		-.3359	-.4192	-.0351	-.0212	-.0034
120.000			.4081	-.0247	-.2943	-.3449	-.3615	-.3378	.0822	-.0433	-.3520	-.2445	-.6417	.0240	.0143
135.000								-.3466		.1394		-.3548		.0170	
150.000			.3881	-.0439	-.3040	-.3498	-.3891	-.3391	.0667	.2582	.0670	-.3170	-.1834	-.0186	-.0494
165.000				-.0407	-.3045	-.3495	-.4067	-.3148	.0386	.2990	.2533	-.0975	-.1944	.0173	.0478
180.000	1.2010	.8076	.3980	-.0397	-.3014	-.3505	-.4075	-.2896	.0280	.1858	.3312	-.0036	-.2277	.0191	.0409
270.000		1.0710							.4986						
K/LT	.7460	.8530	.9280												

PMI



A3C11-716 1A14 01+T12+S:2N23+AT10 EXTERNAL TANK

Time	Temperature	Pressure	Flow Rate	Concentration
0.00	25.00	1.00	1.00	1.00
0.10	25.00	1.00	1.00	1.00
0.20	25.00	1.00	1.00	1.00
0.30	25.00	1.00	1.00	1.00
0.40	25.00	1.00	1.00	1.00
0.50	25.00	1.00	1.00	1.00
0.60	25.00	1.00	1.00	1.00
0.70	25.00	1.00	1.00	1.00
0.80	25.00	1.00	1.00	1.00
0.90	25.00	1.00	1.00	1.00
1.00	25.00	1.00	1.00	1.00
1.10	25.00	1.00	1.00	1.00
1.20	25.00	1.00	1.00	1.00
1.30	25.00	1.00	1.00	1.00
1.40	25.00	1.00	1.00	1.00
1.50	25.00	1.00	1.00	1.00
1.60	25.00	1.00	1.00	1.00
1.70	25.00	1.00	1.00	1.00
1.80	25.00	1.00	1.00	1.00
1.90	25.00	1.00	1.00	1.00
2.00	25.00	1.00	1.00	1.00
2.10	25.00	1.00	1.00	1.00
2.20	25.00	1.00	1.00	1.00
2.30	25.00	1.00	1.00	1.00
2.40	25.00	1.00	1.00	1.00
2.50	25.00	1.00	1.00	1.00
2.60	25.00	1.00	1.00	1.00
2.70	25.00	1.00	1.00	1.00
2.80	25.00	1.00	1.00	1.00
2.90	25.00	1.00	1.00	1.00
3.00	25.00	1.00	1.00	1.00
3.10	25.00	1.00	1.00	1.00
3.20	25.00	1.00	1.00	1.00
3.30	25.00	1.00	1.00	1.00
3.40	25.00	1.00	1.00	1.00
3.50	25.00	1.00	1.00	1.00
3.60	25.00	1.00	1.00	1.00
3.70	25.00	1.00	1.00	1.00
3.80	25.00	1.00	1.00	1.00
3.90	25.00	1.00	1.00	1.00
4.00	25.00	1.00	1.00	1.00
4.10	25.00	1.00	1.00	1.00
4.20	25.00	1.00	1.00	1.00
4.30	25.00	1.00	1.00	1.00
4.40	25.00	1.00	1.00	1.00
4.50	25.00	1.00	1.00	1.00
4.60	25.00	1.00	1.00	1.00
4.70	25.00	1.00	1.00	1.00
4.80	25.00	1.00	1.00	1.00
4.90	25.00	1.00	1.00	1.00
5.00	25.00	1.00	1.00	1.00
5.10	25.00	1.00	1.00	1.00
5.20	25.00	1.00	1.00	1.00
5.30	25.00	1.00	1.00	1.00
5.40	25.00	1.00	1.00	1.00
5.50	25.00	1.00	1.00	1.00
5.60	25.00	1.00	1.00	1.00
5.70	25.00	1.00	1.00	1.00
5.80	25.00	1.00	1.00	1.00
5.90	25.00	1.00	1.00	1.00
6.00	25.00	1.00	1.00	1.00
6.10	25.00	1.00	1.00	1.00
6.20	25.00	1.00	1.00	1.00
6.30	25.00	1.00	1.00	1.00
6.40	25.00	1.00	1.00	1.00
6.50	25.00	1.00	1.00	1.00
6.60	25.00	1.00	1.00	1.00
6.70	25.00	1.00	1.00	1.00
6.80	25.00	1.00	1.00	1.00
6.90	25.00	1.00		

PERCENT VARIABLE CR

11	7460	.8330	.9290
----	------	-------	-------

Year	-0.033	-0.501	-0.1016
30,000	-0.0084	0.434	0.967
60,000	0.337	0.793	1.331
90,000	0.856	1.379	
120,000	1.015	1.697	2.279
135,000	0.994	1.644	1.408
150,000	0.932	1.604	0.964
165,000	1.080	1.997	2.072
180,000	1.126	2.108	2.054

$\alpha = 0.05$ ,  $\beta = 0.80$ ,  $n = 9$

SECTION / OVERVIEW TASK	DEPENDENT VARIABLE CR
1. Introduction	1.1. Introduction
2. Literature Review	2.1. Literature Review
3. Methodology	3.1. Methodology
4. Results	4.1. Results
5. Discussion	5.1. Discussion
6. Conclusion	6.1. Conclusion
7. References	7.1. References
8. Appendix	8.1. Appendix
9. Bibliography	9.1. Bibliography
10. Glossary	10.1. Glossary
11. Index	11.1. Index
12. Summary	12.1. Summary
13. Acknowledgements	13.1. Acknowledgements
14. Declaration	14.1. Declaration
15. Appendix	15.1. Appendix
16. Bibliography	16.1. Bibliography
17. Glossary	17.1. Glossary
18. Index	18.1. Index
19. Summary	19.1. Summary
20. Acknowledgements	20.1. Acknowledgements
21. Declaration	21.1. Declaration
22. Appendix	22.1. Appendix
23. Bibliography	23.1. Bibliography
24. Glossary	24.1. Glossary
25. Index	25.1. Index
26. Summary	26.1. Summary
27. Acknowledgements	27.1. Acknowledgements
28. Declaration	28.1. Declaration
29. Appendix	29.1. Appendix
30. Bibliography	30.1. Bibliography
31. Glossary	31.1. Glossary
32. Index	32.1. Index
33. Summary	33.1. Summary
34. Acknowledgements	34.1. Acknowledgements
35. Declaration	35.1. Declaration
36. Appendix	36.1. Appendix
37. Bibliography	37.1. Bibliography
38. Glossary	38.1. Glossary
39. Index	39.1. Index
40. Summary	40.1. Summary
41. Acknowledgements	41.1. Acknowledgements
42. Declaration	42.1. Declaration
43. Appendix	43.1. Appendix
44. Bibliography	44.1. Bibliography
45. Glossary	45.1. Glossary
46. Index	46.1. Index
47. Summary	47.1. Summary
48. Acknowledgements	48.1. Acknowledgements
49. Declaration	49.1. Declaration
50. Appendix	50.1. Appendix
51. Bibliography	51.1. Bibliography
52. Glossary	52.1. Glossary
53. Index	53.1. Index
54. Summary	54.1. Summary
55. Acknowledgements	55.1. Acknowledgements
56. Declaration	56.1. Declaration
57. Appendix	57.1. Appendix
58. Bibliography	58.1. Bibliography
59. Glossary	59.1. Glossary
60. Index	60.1. Index
61. Summary	61.1. Summary
62. Acknowledgements	62.1. Acknowledgements
63. Declaration	63.1. Declaration
64. Appendix	64.1. Appendix
65. Bibliography	65.1. Bibliography
66. Glossary	66.1. Glossary
67. Index	67.1. Index
68. Summary	68.1. Summary
69. Acknowledgements	69.1. Acknowledgements
70. Declaration	70.1. Declaration
71. Appendix	71.1. Appendix
72. Bibliography	72.1. Bibliography
73. Glossary	73.1. Glossary
74. Index	74.1. Index
75. Summary	75.1. Summary
76. Acknowledgements	76.1. Acknowledgements
77. Declaration	77.1. Declaration
78. Appendix	78.1. Appendix
79. Bibliography	79.1. Bibliography
80. Glossary	80.1. Glossary
81. Index	81.1. Index
82. Summary	82.1. Summary
83. Acknowledgements	83.1. Acknowledgements
84. Declaration	84.1. Declaration
85. Appendix	85.1. Appendix
86. Bibliography	86.1. Bibliography
87. Glossary	87.1. Glossary
88. Index	88.1. Index
89. Summary	89.1. Summary
90. Acknowledgements	90.1. Acknowledgements
91. Declaration	91.1. Declaration
92. Appendix	92.1. Appendix
93. Bibliography	93.1. Bibliography
94. Glossary	94.1. Glossary
95. Index	95.1. Index
96. Summary	96.1. Summary
97. Acknowledgements	97.1. Acknowledgements
98. Declaration	98.1. Declaration
99. Appendix	99.1. Appendix
100. Bibliography	100.1. Bibliography
101. Glossary	101.1. Glossary
102. Index	102.1. Index
103. Summary	103.1. Summary
104. Acknowledgements	104.1. Acknowledgements
105. Declaration	105.1. Declaration
106. Appendix	106.1. Appendix
107. Bibliography	107.1. Bibliography
108. Glossary	108.1. Glossary
109. Index	109.1. Index
110. Summary	110.1. Summary
111. Acknowledgements	111.1. Acknowledgements
112. Declaration	112.1. Declaration
113. Appendix	113.1. Appendix
114. Bibliography	114.1. Bibliography
115. Glossary	115.1. Glossary
116. Index	116.1. Index
117. Summary	117.1. Summary
118. Acknowledgements	118.1. Acknowledgements
119. Declaration	119.1. Declaration
120. Appendix	120.1. Appendix
121. Bibliography	121.1. Bibliography
122. Glossary	122.1. Glossary
123. Index	123.1. Index
124. Summary	124.1. Summary
125. Acknowledgements	125.1. Acknowledgements
126. Declaration	126.1. Declaration
127. Appendix	127.1. Appendix
128. Bibliography	128.1. Bibliography
129. Glossary	129.1. Glossary
130. Index	130.1. Index
131. Summary	131.1. Summary
132. Acknowledgements	132.1. Acknowledgements
133. Declaration	133.1. Declaration

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																																																																													
1960	1.1760	1.2220	1.2680	1.3140	1.3600	1.4060	1.4520	1.4980	1.5440	1.5900	1.6360	1.6820	1.7280	1.7740	1.8200	1.8660	1.9120	1.9580	2.0040	2.0500	2.0960	2.1420	2.1880	2.2340	2.2800	2.3260	2.3720	2.4180	2.4640	2.5100	2.5560	2.6020	2.6480	2.6940	2.7400	2.7860	2.8320	2.8780	2.9240	2.9700	3.0160	3.0620	3.1080	3.1540	3.2000	3.2460	3.2920	3.3380	3.3840	3.4300	3.4760	3.5220	3.5680	3.6140	3.6600	3.7060	3.7520	3.7980	3.8440	3.8900	3.9360	3.9820	4.0280	4.0740	4.1200	4.1660	4.2120	4.2580	4.3040	4.3500	4.3960	4.4420	4.4880	4.5340	4.5800	4.6260	4.6720	4.7180	4.7640	4.8100	4.8560	4.9020	4.9480	4.9940	5.0400	5.0860	5.1320	5.1780	5.2240	5.2700	5.3160	5.3620	5.4080	5.4540	5.5000	5.5460	5.5920	5.6380	5.6840	5.7300	5.7760	5.8220	5.8680	5.9140	5.9600	6.0060	6.0520	6.0980	6.1440	6.1900	6.2360	6.2820	6.3280	6.3740	6.4200	6.4660	6.5120	6.5580	6.6040	6.6500	6.6960	6.7420	6.7880	6.8340	6.8800	6.9260	6.9720	7.0180	7.0640	7.1100	7.1560	7.2020	7.2480	7.2940	7.3400	7.3860	7.4320	7.4780	7.5240	7.5700	7.6160	7.6620	7.7080	7.7540	7.8000	7.8460	7.8920	7.9380	7.9840	8.0300	8.0760	8.1220	8.1680	8.2140	8.2600	8.3060	8.3520	8.3980	8.4440	8.4900	8.5360	8.5820	8.6280	8.6740	8.7200	8.7660	8.8120	8.8580	8.9040	8.9500	8.9960	9.0420	9.0880	9.1340	9.1800	9.2260	9.2720	9.3180	9.3640	9.4100	9.4560	9.5020	9.5480	9.5940	9.6400	9.6860	9.7320	9.7780	9.8240	9.8700	9.9160	9.9620	10.0080	10.0540	10.1000	10.1460	10.1920	10.2380	10.2840	10.3300	10.3760	10.4220	10.4680	10.5140	10.5600	10.6060	10.6520	10.6980	10.7440	10.7900	10.8360	10.8820	10.9280	10.9740	11.0200	11.0660	11.1120	11.1580

7160	.8539	.9287
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[illegible]



ARC11-716 IA14 OL+T12+S12M23+AT10 EXTERNAL TANK (R01733)

ALPHA(11) = 9.070 BETA(10) = 8.110

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.000	1.1570	1.1910	.8359	.3568	-.0012	-.0772	-.1937	-.1329	.0374	.0353	.0754	-.0059	-.0235	-.0225	-.0422
30.000			.6925	.1907	-.1345	-.2018	-.2758	-.2545	-.1929	.2634	.0528	-.0753	-.0770	-.0921	-.0933
60.000			.4854	.0451	-.2526	-.3091	-.3611	-.2925	.2223	.2143	-.0127	-.0508	-.0715	-.0397	-.0406
90.000		.7623	.3823	-.0412	-.3147	-.3615	-.3356	-.2184	.4802		-.3458	-.3982	-.1082	-.0725	-.0305
120.000			.5404	-.0748	-.3289	-.3527	-.3405	-.2373	.0287	-.0168	-.3721	-.1121	-.0707	-.0119	-.0094
150.000								-.1919		.1234		-.3139		-.0212	
180.000			.3422	-.0740	-.3294	-.3722	-.4244	-.1206	.0055	.1891	.0316	-.3710	-.1963	-.0658	-.0687
210.000				-.0718	-.3289	-.3725	-.4268	-.1374	.0116	.1812	.2191	-.1681	-.1463	-.0494	-.0166
240.000	1.1500	.8911	.3761	-.0652	-.3200	-.3679	-.4285	-.3253	.0413	.1277	.1921	-.1787	-.1434	-.0551	-.0334
270.000	1.1570														

X/LT .7480 .8530 .9280

PHI

.000	-.0464	.0603	.0653
30.000	-.0900	.0364	.0758
60.000	.0584	.0742	.1358
90.000	.0780	.1475	
120.000	.1048	.1738	.2378
150.000	.0899	.1616	.1611
180.000	.0659	.1509	.0334
210.000	.0922	.1768	.2897
240.000	.3801	.1771	.2907

ALPHA(11) = 10.000 BETA(11) = 10.190

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.000	1.1130	1.1590	.8071	.3434	-.0113	-.0836	-.1739	-.1456	.0398	-.0340	.0167	-.0019	-.0283	-.0430	-.0332
30.000			.5999	.1524	-.1653	-.2322	-.3090	-.2896	-.1200	.2085	.0463	-.0621	-.0641	-.0971	-.0874
60.000			.4281	-.0021	-.2866	-.3433	-.3286	-.2499	.1345	.1459	-.0181	-.0743	-.0795	-.0269	-.0287
90.000		.7071	.3344	-.0628	-.3401	-.3411	-.3506	-.2205	.4128		-.3715	-.2937	-.0748	-.0488	-.0588
120.000			.5097	-.1063	-.3447	-.3601	-.3528	-.1948	.0050	-.0009	-.3447	-.0793	-.0378	-.0215	-.0312
150.000								-.1244		.0944		-.2684		-.0280	
180.000			.3200	-.1058	-.3431	-.3644	-.4377	-.1275	.0004	.1752	-.0006	-.3520	-.1216	-.0728	-.0634
210.000				-.0933	-.3416	-.3875	-.4457	-.1406	.0090	.1303	.1819	-.1885	-.0964	-.0481	-.0608
240.000	1.1130	.8248	.3645	-.0737	-.3505	-.3819	-.4411	-.2970	.0030	.0942	.1236	-.2003	-.0321	-.1179	-.0709
270.000	1.1980														

X/LT .7480 .8530 .9280

PHI



TABULATED PRESSURE ATA - 1A14A - VOL. 9

(R91733)

APC11-716 1A14 0A-712+512N25+AT10 EXTERNAL TANK

ALPHA(111) = 10.000 BETAC(111) = 10.169

DEPENDENT VARIABLE C<sub>F</sub>

SECTION (1) EXTERNAL TANK

X/UT	.7400	.6500	.9290
PMI			
.000	-.0362	-.0192	.0196
30.000	-.0722	-.0171	.0452
60.000	-.0072	.0000	.1065
90.000	.0255	.1294	
120.000	.0785	.1552	.2276
150.000	.0639	.1329	.1368
180.000	.0425	.1109	.0119
165.000	.0569	.1409	.2999
180.000	.0506	.1133	.2495

ARC11-716 IAL14 06+112+512+25+AT11 EXTERNAL TANK (RB1134) (14 FEB 74)

## REFERENCE DATA

SREF = 2.4210 SQ. FT. TREF = 29.3800 INCHES  
 LREF = 30.7090 INCHES TREF = .0000 INCHES  
 SREF = 30.7090 INCHES TREF = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .600 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

ALPHAT (1) = -0.350 BETAT (1) = -0.070

## SECTION 1 (INTERNAL TANK) DEPENDENT VARIABLE CP

W/LT	.0000	.0050	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PM1															
.000	.8352	.3915	-.0012	-.3031	-.4449	-.4055	-.2943	-.1868	-.1468	-.1701	-.1710	-.1415	-.1106	-.1005	-.0994
30.000			.0895	-.3212	-.4519	-.4364	-.3464	-.2564	-.2514	-.3047	-.2882	-.1814	-.1392	-.1347	-.1098
60.000			.2529	-.1818	-.3365	-.3305	-.2677	-.2187	-.3227	-.4784	-.6434	-.1202	-.0459	-.0508	-.0591
90.000		.6252	.4482	.0721	-.1698	-.1434	-.0328	.0890	.0878	-.7237	-.4629	-.2087	-.1496	-.1315	
120.000			.5840	.1335	-.0744	-.0643	.0279	.1622	.2330	.0337	.0395	.0261	.0075	.0148	.0299
150.000								.1284		.1545		.0101		.0030	
180.000			.6082	.1542	-.0654	-.0690	-.0072	.1059	.1702	.2767	.1592	-.0772	-.1368	-.1259	-.0815
210.000				.1027	-.1148	-.1149	-.0402	.0576	.1412	.2443	.1269	-.1015	-.1293	-.1140	-.0459
270.000	.8352	.9005	.4848	.3385	-.1564	-.1514	-.0726	.0262	.1080	.1975	.0620	-.3059	-.1910	-.1692	-.1052
	.4021								.1290						

ALPHAT (1) = -0.350 BETAT (1) = -0.070

## SECTION 1 (INTERNAL TANK) DEPENDENT VARIABLE CP

W/LT	.0000	.0050	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PM1															
.000	-.0978	-.1556	-.5031												
30.000	-.1809	-.1625	-.5299												
60.000	-.0758	-.1058	-.2632												
90.000	-.1752	-.2784													
120.000	.0293	-.1577	.0523												
150.000	.0290	-.0614	.0027												
180.000	-.0611	-.0972	-.1176												
210.000	-.0290	-.0720	.0682												
270.000	-.0719	-.1066	-.2563												

ALPHAT (1) = -0.350 BETAT (2) = -4.040

## SECTION 1 (INTERNAL TANK) DEPENDENT VARIABLE CP

W/LT	.0000	.0050	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PM1															
.000	.8947	.4428	.0374	-.3529	-.4116	-.3720	-.2526	-.1475	-.1187	-.1437	-.1489	-.1086	-.0750	-.0575	-.0834
30.000			.3806	-.3207	-.4216	-.3687	-.2875	-.1967	-.1840	-.2437	-.2590	-.1344	-.1009	-.0899	-.0808
60.000			.1845	-.2386	-.3584	-.3274	-.2528	-.1794	-.2891	-.4199	-.6568	-.1296	-.0482	-.0533	-.0553
90.000		.7346	.3415	-.0987	-.2297	-.1886	-.0649	.0732	.0910	-.6893	-.6820	-.4620	-.2023	-.1311	-.1191
120.000			.4804	.0371	-.1355	-.1128	-.0119	.1254	.2175	.0287	-.0156	-.0321	-.0419	-.0323	-.0116
150.000								.1017		.1250		-.0432		-.0413	
180.000			.5516	.0944	-.1077	-.0990	-.0339	-.0662	.1589	.2364	.0242	-.0366	-.1378	-.1375	-.0559



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4731

ASC11-716 1A14 CR-7112-S12M25-AT111 EXTERNAL TANK (R01734)

ALPHAT(1) = -0.330 BETAT(2) = -4.040

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

R/LT	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5590	.6360
PHI														
165.000				.0988	-.1117	-.1117	-.0342	.0678	.1506	.2448	.1013	-.1500	-.1396	-.1080
180.000	.0947	.9281	.5232	.0651	-.1309	-.1243	-.0441	.0599	.1336	.2263	.0932	-.3033	-.1573	-.1251
270.000		.5186						.0993						-.0756

R/LT .7460 .8330 .9280

## PHI

.000	-.0741	-.1275	-.4560
30.000	-.0852	-.1272	-.4721
60.000	-.0703	-.0896	-.2623
90.000	-.1192	-.1619	
120.000	-.0073	-.1864	.0241
135.000	-.0096	-.3842	-.0274
150.000	-.0803	-.1201	-.1405
165.000	-.0334	-.0790	.0677
180.000	-.0478	-.0993	-.2199

ALPHAT(1) = -0.310 BETAT(3) = .010

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

R/LT	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5590	.6360
PHI														
.000	.9195	.4774	.0515	-.3454	-.3978	-.3537	-.2410	-.1376	-.1279	-.1269	-.0987	-.0622	-.0494	-.0360
30.000			.0634	-.3296	-.3973	-.3596	-.2463	-.1452	-.1265	-.1931	-.1232	-.0735	-.0729	-.0608
60.000			.1181	-.2882	-.3585	-.3132	-.2210	-.1577	-.2148	-.3513	-.1373	-.0479	-.0570	-.0518
90.000	.6326		.2276	-.1547	-.2766	-.2196	-.0828	.0664	.0960	-.6511	.4309	-.1778	-.1114	-.0827
120.000			.3586	-.0171	-.2023	-.1753	-.0577	.0926	.0184	-.0528	-.0906	-.0639	-.0369	-.0316
135.000								.0646	.0590		-.1051		-.0755	
150.000			.4737	.0214	-.1553	-.1476	-.0717	.0614	.1393	.1875	-.1340	-.2411	-.1793	-.1492
165.000			.0717	-.1309	-.1237	-.0414	.0599	.1434	.2323	.0381	-.2049	-.1504	-.1111	-.0592
180.000	.9195	.9302	.5290	.0744	-.1303	-.1216	-.0314	.0635	.1515	.2302	.0997	-.3117	-.1532	-.1012
270.000		.6285						.0878						-.0902

R/LT .7460 .8330 .9280

## PHI

.000	-.0344	-.1155	-.4527
30.000	-.0640	-.1095	-.4333
60.000	-.0598	-.0623	-.2658
90.000	-.0287	-.1174	
120.000	-.0346	-.1178	-.0992
135.000	-.0433	-.1350	-.1437
150.000	-.1220	-.1619	-.2199

ARC11-716 IA14 OA+T12+S12N25+AT11 EXTERNAL TANK (R81T34)

ALPHAT (1) = -0.310 BETAT (3) = .010

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PM1			
165.000	-.0512	-.0929	.0767
180.000	-.0398	-.0839	-.1634

ALPHAT (1) = -0.320 BETAT (4) = 4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5090	.5990	.6360
PM1															
.000	.6948	.4429	.0324	-.3551	-.4098	-.3720	-.2556	-.1484	-.1149	-.1405	-.1453	-.1076	-.0790	-.0634	-.0840
30.000			.0253	-.3578	-.3899	-.3450	-.2158	-.1166	-.0916	-.1561	-.1948	-.1103	-.0556	-.0461	-.0497
60.000			.0422	-.3379	-.3574	-.3031	-.1901	-.0934	-.1538	-.3165	-.6395	-.1124	-.0494	-.0488	-.0312
90.000		.5138	.1055	-.2838	-.3134	-.2445	-.0922	.0712	.1194		-.6551	-.3791	-.1451	-.0933	-.0706
120.000			.2333	-.1786	-.2765	-.2336	-.0990	.0586	.1945	.0716	-.0917	-.1277	-.1026	-.0852	-.0614
135.000								.0188		.0373		-.1579		-.1213	
150.000			.3674	-.0674	-.2278	-.2079	-.1237	.0102	.0996	.1150	-.2814	-.4308	-.3356	-.2451	-.1777
165.000				.0182	-.1709	-.1624	-.0803	.0253	.1114	.1869	-.0174	-.2408	-.1681	-.1234	-.0909
180.000	.6948	.9213	.5194	.0645	-.1357	-.1320	-.0490	.0497	.1399	.2041	.0870	-.2917	-.1660	-.1586	-.0882
270.000		.7335							.0785						

X/LT .7480 .8530 .9280

PM1

X/LT	.7480	.8530	.9280
PM1			
.000	-.0718	-.1236	-.4471
30.000	-.0644	-.1128	-.4346
60.000	-.0605	-.0907	-.3071
90.000	-.0695	-.1033	
120.000	-.0653	-.1822	-.1087
135.000	-.0760	-.1441	-.2052
150.000	-.1789	-.2451	-.3363
165.000	-.0791	-.1370	-.0414
180.000	-.0809	-.1280	-.3017

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TABULATED PRESSURE DATA - 1A14 - VOL. 9

DATE 06 JAN 75

(RB1734)

ARC11-716 1A14 Q1+T12+S12N23+AT11 EXTERNAL TANK

ALPHAT ( 1 ) = -0.350 BETAT ( 5 ) = 0.150

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8323	.3784	-.0094	-.3835	-.4361	-.3939	-.2872	-.1614	-.1464	-.1685	-.1717	-.1372	-.1041	-.0978	-.0887
30.000			-.0349	-.3885	-.3915	-.3378	-.2101	-.1002	-.0725	-.1317	-.1780	-.1092	-.0587	-.0832	-.0726
60.000			-.0284	-.3820	-.3494	-.2875	-.1601	-.0584	-.1055	-.2793	-.6280	-.1119	-.0536	-.0548	-.0613
90.000		.3934	.0082	-.3574	-.3313	-.2481	-.0862	.0797	.1316	-.6341	-.3254	-.1216	-.0765	-.0765	-.0574
120.000			.0063	-.2788	-.3313	-.2808	-.1390	.0357	.1777	-.0210	-.1217	-.1605	-.1396	-.1297	-.1097
150.000							-.0298			-.0153		-.2246		-.1783	
180.000			.2544	-.1679	-.2983	-.2691	-.1820	.0472	.0329	-.3818	-.3818	-.5167	-.4344	-.2975	-.2509
210.000			-.0468	-.2293	-.2150	-.1337	-.0277	.0575	.1086	-.1083	-.1083	-.3150	-.2235	-.2199	-.1508
240.000	.8323	.8135	.4864	.0310	-.1648	-.1601	-.0732	.0156	.1025	.1494	.0470	-.2905	-.2774	-.2229	-.1580
270.000		.8214													
X/LT	.7480	.8330	.9280												

PHI

.000	-.0987	-.1491	-.4850
30.000	-.0898	-.1360	-.4466
60.000	-.0672	-.0971	-.3340
90.000	-.0728	-.1200	
120.000	-.1157	-.2139	-.1309
150.000	-.1193	-.1637	-.2216
180.000	-.2451	-.2897	-.3387
210.000	-.1366	-.1770	-.0748
240.000	-.1637	-.2070	-.2263

ALPHAT ( 2 ) = -4.310 BETAT ( 1 ) = -0.130

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9059	.5177	.1165	-.3047	-.4076	-.3792	-.2790	-.1784	-.1417	-.1585	-.1467	-.1296	-.1114	-.0993	-.0992
30.000			.2242	-.2097	-.3752	-.3622	-.2769	-.1991	-.1953	-.2418	-.1956	-.1473	-.1265	-.1133	-.0971
60.000			.3668	-.0840	-.2824	-.2547	-.1772	-.1033	-.1989	-.4309	-.4054	-.0804	-.0463	-.0480	-.0516
90.000		.8930	.4956	.0407	-.1320	-.1017	.0097	.1429	.1996	-.2069	-.2069	-.0019	-.0361	-.0397	-.0477
120.000			.5450	.0924	-.1007	-.0848	.0044	.1195	.1562	-.0261	.0317	.0378	.0026	-.0006	.0190
150.000								.0752		.1077		.0283		-.0159	
180.000			.5103	.0531	-.1408	-.1337	-.0668	.0477	.1080	-.0744	.0278	-.0744	-.1464	-.1224	-.0749
210.000			-.0034	-.1884	-.1823	-.1003	.0051	.0900	.0900	.2095	.1122	-.0911	-.1321	-.1137	-.0407
240.000	.9059	.8159	.3752	-.0613	-.2285	-.2086	-.1161	-.0095	.0714	.1785	.0562	-.2968	-.1825	-.1608	-.0898
270.000		.4656													
X/LT	.7480	.8330	.9280												

PHI

.000	-.0987	-.1491	-.4850
30.000	-.0898	-.1360	-.4466
60.000	-.0672	-.0971	-.3340
90.000	-.0728	-.1200	
120.000	-.1157	-.2139	-.1309
150.000	-.1193	-.1637	-.2216
180.000	-.2451	-.2897	-.3387
210.000	-.1366	-.1770	-.0748
240.000	-.1637	-.2070	-.2263

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ARC11-716 1A14 01+T12+912N23+AT11 EXTERNAL TANK

(RB1734)

ALPHAT ( 2 ) = -4.310 BETAT ( 1 ) = -0.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000 -.1026 -.1565 -.5162  
 30.000 -.0976 -.1560 -.4951  
 60.000 -.0624 -.0805 -.2320  
 90.000 -.0740 -.1523  
 120.000 .0400 -.0873 .0965  
 135.000 .0471 -.0116 .0101  
 150.000 -.0262 -.0567 -.0360  
 165.000 .0365 -.0252 .0794  
 180.000 -.0312 -.0354 -.2402

ALPHAT ( 2 ) = -4.300 BETAT ( 2 ) = -4.060

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5090 .5980 .6380

PHI

.000 .9689 .3710 .1534 -.2725 -.3779 -.3540 -.2474 -.1409 -.1081 -.1253 -.1102 -.0916 -.0716 -.0637 -.0574  
 30.000 .2040 -.2264 -.3628 -.3434 -.2431 -.1534 -.1442 -.1986 -.1545 -.1089 -.0958 -.0794 -.0690  
 60.000 .2948 -.1507 -.2869 -.2647 -.1738 -.0900 -.1688 -.4109 -.4093 -.1071 -.0995 -.0903 -.0482  
 90.000 .8029 .3842 -.0652 -.1943 -.1520 -.0193 .1325 .1999 -.1498 -.0189 -.0309 -.0461 -.0381  
 120.000 .4430 -.0069 -.1639 -.1362 -.0264 .0984 .1530 -.0496 .0018 -.0100 -.0404 -.0390 -.0169  
 135.000 .4629 .0761 -.1736 -.1570 -.0797 .0444 .0829 -.0546 -.0445 -.0470  
 150.000 -.0124 -.1946 -.1786 -.0865 .1127 .2132 .0547 .1327 .1370  
 165.000 .9689 .8420 .4080 -.0375 -.2074 -.1905 -.0903 .1127 .2181 .1031 -.1375 -.1070 -.0409  
 180.000 .5843 .1094 .1986 .0910 -.2951 -.1509 -.1267 -.0652  
 270.000 .2191

X/LT .7460 .8530 .9280

PHI

.000 -.0673 -.1184 -.4806  
 30.000 -.0673 -.1086 -.4687  
 60.000 -.0483 -.0677 -.2590  
 90.000 -.0364 -.0650  
 120.000 .0099 -.1193 .0273  
 135.000 .0117 -.0334 -.0082  
 150.000 -.0449 -.0677 -.1114  
 165.000 -.0019 -.0335 .0868  
 180.000 -.0194 -.0559 -.1947



TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RBT34)

DATE 06 JAN 75

ALPHAT ( 2 ) = -4.300 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	.9926	.5914	.1571	-.2637	-.3690	-.3415	-.2338	-.1292	-.0936	-.1112	-.1012	-.0786	-.0594	-.0488	-.0423
30.000			.1677	-.2515	-.3602	-.3303	-.2214	-.1238	-.1052	-.1619	-.1354	-.0891	-.0695	-.0602	-.0534
60.000			.2117	-.2161	-.3071	-.2719	-.1697	-.0680	-.1294	-.1833	-.1014	-.1289	-.0683	-.0479	-.0428
90.000		.6995	.2704	-.1634	-.2429	-.1842	-.0416	.1256	.2071		-.1303	-.0157	-.0443	-.0489	-.0423
120.000			.3378	-.0967	-.2165	-.1806	-.0592	.0798	.1518	-.0593	-.0357	-.0534	-.0739	-.0647	-.0383
135.000								.0420		.0566		-.0891		-.0770	
150.000			.3948	-.0520	-.2097	-.1830	-.0997	.0310	.1065	.1688	-.1105	-.1809	-.2099	-.1798	-.1355
165.000				-.0282	-.2030	-.1806	-.0904	.0248	.1124	.2083	.0441	-.1929	-.1362	-.1224	-.0643
180.000	.9926	.8437	.4215	-.0294	-.1974	-.1833	-.0791	.0254	.1139	.2018	.0990	-.2985	-.1458	-.1057	-.0433
270.000		.7048							.2090						
X/LT	.7460	.8530	.9280												

PMI															
.000	-.0499	-.1067	-.4716												
30.000	-.0493	-.0984	-.4513												
60.000	-.0478	-.0655	-.2951												
90.000	-.0308	-.0557													
120.000	-.0146	-.1363	-.0582												
135.000	-.0176	-.0637	-.1162												
150.000	-.0951	-.1192	-.2691												
165.000	-.0255	-.0573	.0826												
180.000	-.0190	-.0513	-.1547												

ALPHAT ( 2 ) = -4.300 BETAT ( 4 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	.9688	.5659	.1451	-.2746	-.3802	-.3537	-.2493	-.1457	-.1078	-.1294	-.1182	-.0944	-.0735	-.0648	-.0568
30.000			.1201	-.2909	-.3694	-.3288	-.2160	-.1065	-.0838	-.1483	-.1323	-.0932	-.0651	-.0618	-.0530
60.000			.1239	-.2832	-.3257	-.2750	-.1561	-.0420	-.0820	-.3469	-.3534	-.1448	-.0893	-.0839	-.0485
90.000		.5810	.1538	-.2554	-.2816	-.2131	-.0327	.1273	.2233		-.1060	-.0249	-.0329	-.0640	-.0500
120.000			.2191	-.1932	-.2763	-.2224	-.0869	.0662	.1502	-.0714	-.0589	-.0872	-.1011	-.0832	-.0538
135.000								.0191		.0169		-.1311		-.1171	
150.000			.3050	-.1313	-.2599	-.2271	-.1350	-.0001	.0813	.1115	-.2449	-.3645	-.3290	-.2447	-.1975
165.000				-.0714	-.2368	-.2131	-.1178	-.0087	.0837	.1749	-.0208	-.2304	-.1580	-.1251	-.0845
180.000	.9688	.8419	.4126	-.0457	-.2107	-.1944	-.0979	.0076	.1044	.1794	.0839	-.2757	-.1631	-.1567	-.0848
270.000		.8015							.1896						
X/LT	.7460	.8530	.9280												



(RB1734)

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK

ALPHAT ( 2 ) = -4.300 BETAT ( 4 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK  
DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI  
 .000 -.0642 -.1207 -.4805  
 30.000 -.0556 -.1025 -.4458  
 60.000 -.0490 -.0760 -.3197  
 90.000 -.0407 -.0725  
 120.000 -.0432 -.1406 -.1003  
 135.000 -.0580 -.0951 -.1726  
 150.000 -.1481 -.1909 -.2858  
 165.000 -.0540 -.0905 -.0016  
 180.000 -.0319 -.0911 -.2644

ALPHAT ( 2 ) = -4.300 BETAT ( 5 ) = 8.130

SECTION ( 1 ) EXTERNAL TANK  
DEPENDENT VARIABLE CP

X/LT .0000 .0060 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4510 .5030 .5590 .6360

PHI  
 .000 .9021 .5010 .0998 -.3039 -.4136 -.3633 -.2846 -.1814 -.1480 -.1646 -.1486 -.1270 -.1121 -.1006 -.0991  
 30.000 .0377 -.3407 -.3650 -.3404 -.2181 -.1044 -.0788 -.0788 -.1398 -.1316 -.0995 -.0786 -.0729 -.0782  
 60.000 .0300 -.3436 -.3294 -.2706 -.1368 -.0174 -.0432 -.0432 -.3129 -.3176 -.1533 -.0920 -.0708 -.0625  
 90.000 .4809 .0438 -.3229 -.2973 -.2154 -.0462 .1312 .2426 -.0760 -.0279 -.0610 -.0807 -.0783  
 120.000 .1056 -.2820 -.3139 -.2308 -.1104 .0514 .1470 -.0809 -.1053 -.1243 -.1322 -.1266 -.1097  
 135.000 .2019 -.2183 -.3101 -.2770 -.1728 -.0390 .0905 .0390 .0390 .4723 -.4035 -.2783 -.2274  
 150.000 -.1286 -.2821 -.2346 -.1603 -.0479 .0413 .0933 -.0993 -.2819 -.2213 -.2106 -.1359  
 165.000 .9021 .7397 .3753 -.0751 -.2400 -.2192 -.1232 -.0266 .0730 .1216 .0427 -.2741 -.2759 -.2241 -.1332  
 180.000 .8918  
 270.000 .1910

X/LT .7480 .8730 .9280

PHI  
 .000 -.1053 -.1569 -.5083  
 30.000 -.0788 -.1165 -.4224  
 60.000 -.0624 -.0852 -.3092  
 90.000 -.0806 -.1313  
 120.000 -.0877 -.1650 -.1365  
 135.000 -.0916 -.1194 -.1903  
 150.000 -.2036 -.2283 -.3059  
 165.000 -.1078 -.1416 -.0489  
 180.000 -.1299 -.1660 -.2997



## ARC11-716 IAI4 OL+T12+S12N23+AT11 EXTERNAL TANK

(R81734)

ALPHAT ( 3 ) = -.490 BETAT ( 1 ) = -8.150

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
Phi															
.000	.9330	.6202	.2298	-.2135	-.3590	-.3442	-.2534	-.1519	-.1189	-.1312	-.1227	-.1151	-.1032	-.0976	-.0907
30.000			.3435	-.1049	-.3028	-.2935	-.2147	-.1318	-.1237	-.1735	-.1322	-.1038	-.0958	-.0883	-.0690
60.000			.4801	-.0018	-.1907	-.1819	-.1031	-.0137	-.0753	-.3224	-.2300	-.0990	-.0391	-.0221	-.0114
90.000		.9195	.5189	.0630	-.1094	-.0840	.0328	.1766	.2504	-.1388	.0071	-.0149	-.0194	.0006	
120.000			.4889	.0427	-.1415	-.1291	-.0362	.0659	.0736	-.1005	.0354	.0396	.0020	.0000	.0183
150.000								.0157		.0666		.0263		-.0046	
180.000			.4112	-.0353	-.2083	-.1989	-.1209	-.0092	.0495	.2119	.1033	-.0696	-.1491	-.1094	-.0587
210.000				-.0985	-.2604	-.2399	-.1466	-.0327	.0519	.1838	.0997	-.0752	-.1321	-.1032	-.0251
240.000	.9330	.7909	.2750	-.1524	-.2782	-.2560	-.1416	-.0291	.0492	.1590	.0634	-.2816	-.1728	-.1504	-.0679
		.4871													
X/LT	.7460	.6530	.9280												

Phi

.000	-.0992	-.1527	-.5123
30.000	-.0736	-.1115	-.4740
60.000	-.0129	-.0285	-.2479
90.000	.0103	-.0273	
120.000	.0656	-.0155	.0673
150.000	.0759	.0368	.0224
180.000	.0094	-.0143	-.0567
	.0460	.0130	.0776
	.0076	-.0170	-.2283

ALPHAT ( 3 ) = -.470 BETAT ( 2 ) = -4.080

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
Phi															
.000	.9978	.6841	.2631	-.1885	-.3359	-.3185	-.2212	-.1201	-.0859	-.1004	-.0955	-.0821	-.0665	-.0580	-.0456
30.000			.3146	-.1394	-.3084	-.2872	-.2016	-.1041	-.0939	-.1481	-.1163	-.0848	-.0644	-.0614	-.0483
60.000			.3743	-.0864	-.2349	-.2106	-.1201	-.0172	-.0530	-.3211	-.2293	-.1230	-.0638	-.0470	-.0307
90.000		.6292	.4035	-.0462	-.1828	-.1405	-.0012	.1552	.2110	-.1561	-.0336	-.0333	-.0468	-.0242	
120.000			.3974	-.0438	-.1960	-.1703	-.0596	.0549	.0762	-.1206	-.0076	-.0088	-.0485	-.0456	-.0167
150.000								.0189		.0422		-.0522		-.0524	
180.000			.3653	-.0845	-.2329	-.2121	-.1269	.0008	.0611	.1833	.0961	-.1090	-.1546	-.1378	-.0767
210.000				-.1102	-.2583	-.2340	-.1287	-.0181	.0753	.1964	.0973	-.1365	-.1322	-.1018	-.0307
240.000	.9978	.7441	.3030	-.1396	-.2669	-.2352	-.1552	-.0080	.0791	.1825	.0911	-.2920	-.1432	-.1149	-.0353
		.6170													
X/LT	.7460	.6530	.9280												

Phi

ARC11-716 1A14 01+T12+S12N25+AT11 EXTERNAL TANK (R81734)

ALPHAT (3) = -.470 BETAT (2) = -4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

.000 -.0383 -.1140 -.4803  
 30.000 -.0318 -.0867 -.4571  
 60.000 -.0233 -.0351 -.2821  
 90.000 .0044 -.0155  
 120.000 .0260 -.0347 .0171  
 135.000 .0339 .0059 -.0061  
 150.000 -.0161 -.0327 -.0925  
 165.000 .0274 .0026 .0657  
 180.000 .0151 -.0205 -.1975

ALPHAT (3) = -.470 BETAT (3) = .000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5590 .6360

PHI

.000 1.0170 .7041 .2721 -.1750 -.3313 -.3125 -.2177 -.1079 -.0706 -.0908 -.0838 -.0650 -.0575 -.0458 -.0340  
 30.000 .2780 -.1744 -.3171 -.2980 -.1965 -.0888 -.0662 -.1279 -.1021 -.0722 -.0584 -.0316 -.0590  
 60.000 .2780 -.1608 -.2777 -.2389 -.1257 -.0041 -.0299 -.3029 -.2115 -.1355 -.0760 -.0542 -.0375  
 90.000 .7233 .2871 -.1453 -.2341 -.1750 -.0210 .1904 .2624 -.1701 -.0312 -.0716 -.0629 -.0390  
 120.000 .2989 -.1307 -.2383 -.1973 -.0778 .0536 .0874 .1237 -.0400 -.0348 -.0793 -.0686 -.0342  
 135.000 .3125 -.1298 -.2562 -.2233 -.1254 -.0007 .0159 .0265  
 150.000 .3125 -.2562 -.2233 -.1254 -.0007 .0159 .0265  
 165.000 .3110 .7467 .7307 .0718 .1421 -.1090 -.1621 -.1948 -.1676 -.1175  
 180.000 .3110 .7467 .7307 .0849 .1897 .0444 -.1771 -.1351 -.1199 -.0824  
 270.000 .7307 .0876 .1841 .0998 -.2886 -.1387 -.0987 -.0316  
 .2580

X/LT .7460 .8330 .9280

PHI

.000 -.0401 -.0977 -.4631  
 30.000 -.0410 -.0870 -.4434  
 60.000 -.0351 -.0339 -.2917  
 90.000 -.0088 -.0175  
 120.000 .0020 -.0795 -.0559  
 135.000 .0073 -.0817 -.0842  
 150.000 -.0998 -.0712 -.2282  
 165.000 .0042 -.0174 .0760  
 180.000 .0102 -.0162 -.1438



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OL+712+S12N29+7111 EXTERNAL TANK

(891734)

ALPHA( 3 ) = -.470 BETAT ( 4 ) = 4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2600	.3440	.3940	.4510	.5050	.5580	.6380
741															
.000	.9918	.6713	.2541	-.1902	-.3432	-.3235	-.2274	-.1104	-.0872	-.1087	-.0949	-.0868	-.0712	-.0610	-.0478
30.000	.1998	-.2259	-.3435	-.3144	-.2039	-.0832	-.0832	-.0832	-.0562	-.1207	-.1057	-.0850	-.0703	-.0586	-.0487
60.000	.1744	-.2404	-.3092	-.2338	-.1277	.0068	.0068	.0068	-.0808	-.2763	-.1961	-.1175	-.0793	-.0574	-.0406
90.000	.1654	-.2371	-.2717	-.1965	-.0290	.1502	.2831	.2831	-.1260	-.0380	-.0826	-.0378	-.0303	-.0303	
120.000	.1575	-.2178	-.2753	-.2274	-.0888	.0515	.1025	.1025	-.0623	-.0547	-.1012	-.0848	-.0498		
135.000						.0090	.0090	.0090		.0317	-.1328	-.1063			
150.000	.2351	-.1913	-.2861	-.2936	-.1447	-.0095	.0534	.1025	-.2273	.1025	-.2273	-.3350	-.3198	-.2402	-.1316
165.000		-.1613	-.2817	-.2515	-.1447	-.0247	.0569	.1604	-.0174	-.2234	-.1546	-.1149	-.0725		
180.000	.9918	.7516	.3054	-.1425	-.2729	-.2427	-.1549	-.0239	.0761	.1604	.0887	-.2673	-.1603	-.1448	-.0734
270.000	.8333								.2440						
X/LT	.7460	.8530	.9280												

X/LT .7460 .8530 .9280

741

.000	-.0585	-.1135	-.4688												
30.000	-.0510	-.0929	-.4325												
60.000	-.0423	-.0617	-.3005												
90.000	-.0235	-.0385													
120.000	-.0218	-.1007	-.0956												
135.000	-.0244	-.0545	-.1477												
150.000	-.1081	-.1433	-.2597												
165.000	-.0239	-.0527	.0134												
180.000	-.0268	-.0583	-.2567												

ALPHA( 3 ) = -.470 BETAT ( 5 ) = 8.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2600	.3440	.3940	.4510	.5050	.5580	.6380
741															
.000	.9235	.6093	.2130	-.2272	-.3702	-.3591	-.2678	-.1573	-.1261	-.1459	-.1357	-.1247	-.1086	-.1081	-.0951
30.000			.1170	-.2882	-.3755	-.3402	-.2218	-.0990	-.0625	-.1220	-.1225	-.1008	-.0853	-.0801	-.0671
60.000			.0739	-.3130	-.3261	-.2666	-.1246	.0228	.0185	-.2555	-.1800	-.1346	-.0871	-.0660	-.0549
90.000	.4777	.0519	-.3151	-.2873	-.2091	-.0244	.1657	.2994	.2994	-.1499	-.0801	-.1102	-.1041	-.0838	
120.000		.0801	-.2951	-.2985	-.2457	-.0910	.0545	.1099	.1099	-.1294	-.1038	-.1128	-.1346	-.1246	-.0971
135.000						-.0018				-.0208	-.1652	-.1517			
150.000	.1386	-.2643	-.3202	-.2793	-.1680	-.0356	.0444	.0469	.0444	-.3452	-.3998	-.3937	-.2850	-.2028	
165.000		-.2159	-.3138	-.2832	-.1760	-.0646	.0261	.0941	.0261	-.0140	-.2629	-.2111	-.2039	-.1270	
180.000	.6204	.2624	-.1751	-.2956	-.2720	-.1552	-.0804	.0382	.0382	.0381	-.2545	-.2749	-.2116	-.1455	
270.000	.9206														
X/LT	.7460	.8530	.9280												

X/LT .7460 .8530 .9280

741

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TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 474D

ARC11-71.6 IAI4 01+712+512N25+AT.1 EXTERNAL TANK (RB1754)

ALPHAT ( 3 ) = -.470 BETAT ( 3 ) = 0.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.1081	-.1564	-.2041
30.000	-.0716	-.1079	-.14272
60.000	-.0459	-.0836	-.1167
90.000	-.0297	-.0539	
120.000	-.0266	-.1165	-.1136
135.000	-.0617	-.0802	-.1784
150.000	-.1570	-.1841	-.3062
165.000	-.0763	-.0994	-.0398
180.000	-.0986	-.1329	-.3033

ALPHAT ( 4 ) = 3.950 BETAT ( 1 ) = -8.170

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5560	.6360
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI

.000	.9151	.7306	.3461	-.1161	-.3016	-.3023	-.2167	-.1188	-.0841	-.0987	-.0946	-.0892	-.0812	-.0651	-.0608
30.000			.4748	.0121	-.2123	-.2155	-.1457	-.0611	-.0478	-.0999	-.0640	-.0546	-.0519	-.0480	-.0456
60.000			.5420	.0786	-.1294	-.1204	-.0406	.0663	.0462	-.2080	-.0536	-.0229	-.0292	-.0805	-.0139
90.000		.9024	.5075	.0325	-.1288	-.0969	.0239	.1625	.2378		-.2814	-.0486	-.0288	-.0079	.0136
120.000			.3976	-.0322	-.2137	-.2022	-.1141	-.0314	-.0370	-.2041	-.0940	.0044	.0019	.0046	.0370
135.000								-.0764		-.0113		.0070		-.0079	
150.000			.2780	-.1566	-.3014	-.2802	-.1994	-.0916	-.0370	.1543	.0619	-.0782	-.1363	-.0997	-.0414
165.000	.9151	.9952	.1450	-.2208	-.3390	-.3091	-.2012	-.0871	.0207	.1467	.0747	-.0754	-.1106	-.1012	-.0052
180.000		.4624		-.2625	-.3405	-.3059	-.1783	-.0552	.0226	.1325	.0539	-.2775	-.1602	-.1379	-.0325
270.000									.2897						

X/LT .7460 .8530 .9280

PHI

.000	-.0926	-.1437	-.4976
30.000	-.0471	-.0659	-.4407
60.000	-.0010	-.0061	-.2107
90.000	.0287	-.0171	
120.000	.1013	.0479	.0639
135.000	.1066	.0619	.0426
150.000	.0407	.0199	-.0136
165.000	.0763	.0516	.0823
180.000	.0593	.0132	-.2203

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TABULATED PRESSURE DATA - IAI14 - VOL. 9

PAGE 4741

ARC11-716 IAI14 D1+12+S12N25+AT11 EXTERNAL TANK

(R81T34)

ALPHAT (4) = 3.970 BETAT (2) = -4.050

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/1	0.000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
THI															
0.000	.9784	.8020	.3952	-.0713	-.2658	-.2599	-.1764	-.0823	-.0440	-.0563	-.0522	-.0511	-.0466	-.0387	-.0399
30.000		.4416	-.0282	-.2329	-.2293	-.1921	-.0424	-.0211	-.0766	-.0498	-.0370	-.0384	-.0357	-.0246	
60.000		.4424	-.0160	-.1903	-.1667	-.0689	.0583	.0607	-.2084	-.0650	-.0352	-.0408	-.0360	-.0282	
90.000		.6020	.3939	-.0537	-.1988	-.1429	.0082	.1445	.2369	-.2494	-.0856	-.0671	-.0348	-.0079	
120.000		.3110	-.1126	-.1249	-.2229	-.1207	-.0235	-.0351	-.2078	-.1229	-.0759	-.0524	-.0348	.0004	
150.000		.2422	-.1875	-.3010	-.2696	-.1793	-.0592	-.0026	.1413	.0799	-.1908	-.1466	-.1273	-.0484	
180.000	.9784	.6173	.1752	-.2390	-.3163	-.2819	-.1731	-.0527	.0396	.0823	-.1245	-.1088	-.0811	-.0107	
210.000		.5922		-.3204	-.2772	-.1528	-.0345	.1597	.0909	-.2731	-.1241	-.0909	-.0307		
X/1	.7460	.6530	.9280					.2622							

THI

0.000	-.0445	-.1006	-.4667
30.000	-.0274	-.0633	-.4223
60.000	-.0149	-.0192	-.2263
90.000	.0232	-.0004	
120.000	.0639	.0103	.0449
150.000	.0764	.0565	-.0011
180.000	.0280	.0070	-.0832
210.000	.0659	.0404	.0940
240.000	.0505	.0206	-.1958

ALPHAT (4) = 3.970 BETAT (3) = .000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/1	0.000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
THI															
0.000	.9997	.8216	.4015	-.0613	-.2026	-.2518	-.1707	-.0715	-.0342	-.0479	-.0404	-.0365	-.0353	-.0311	-.0230
30.000		.3795	-.0946	-.2583	-.2432	-.1497	-.0595	-.0149	-.0705	-.0511	-.0449	-.0374	-.0383	-.0358	
60.000		.3393	-.1133	-.2416	-.2051	-.0899	.0415	.0683	-.2010	-.0704	-.0443	-.0503	-.0440	-.0388	
90.000	.7059	.2778	-.1564	-.2384	-.1900	.0318	.1381	.2460	-.2201	-.0910	-.0801	-.0533	-.0204		
120.000		.2262	-.1885	-.2781	-.2357	-.1174	-.0064	-.0040	-.2030	-.1427	-.1096	-.0802	-.0679	-.0215	
150.000		.1880	-.2161	-.3114	-.2705	-.1631	-.0351	.0268	-.0178	-.1110	-.0802	-.1743	-.1412	-.0920	
180.000		.2212	-.3155	-.2751	-.1959	-.0374	.0324	.1642	.0412	-.0412	-.1826	-.1223	-.0938	-.0234	
210.000	.9997	.6166	.1819	-.2309	-.3190	-.2757	-.1157	-.0324	.0413	.1624	.1050	-.1217	-.0789	-.0085	
240.000		.7091						.2454							
X/1	.7460	.6530	.9280												

THI

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ARC11-716 1A14 0A+T12+S12N25+AT11 EXTERNAL TANK

(RB1734)

ALPHAT ( 4 ) = 3.970 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.000 -.0298 -.0810 -.4482  
 30.000 -.0257 -.0650 -.4165  
 60.000 -.0263 -.0375 -.2511  
 90.000 .0088 -.0061  
 120.000 .0379 -.0233 .0016  
 135.000 .0435 .0232 -.0635  
 150.000 -.0194 -.0197 -.1697  
 165.000 .0394 .0176 .0902  
 180.000 .0488 .0264 -.1943

ALPHAT ( 4 ) = 3.960 BETAT ( 4 ) = 4.090

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0090 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PMI

.000 .9811 .7897 .3763 -.0782 -.2748 -.2674 -.1873 -.0867 -.0525 -.0672 -.0541 -.0341 -.0493 -.0419 -.0407  
 30.000 .2918 -.1505 -.3033 -.2820 -.1791 -.0697 -.0260 -.0822 -.0658 -.0386 -.0512 -.0518 -.0479  
 60.000 .2157 .2076 .2936 .2401 .1135 .0339 .0794 .1893 .0798 .0463 .0321 .0485 .0452  
 90.000 .1618 .2167 .2783 .2000 .0349 .1417 .2639 .1832 .0971 .0866 .0637 .0290  
 120.000 .1350 .2557 .2990 .2419 .1106 .0168 .0281 .1884 .1529 .1367 .1105 .0864 .0392  
 135.000 .1441 .2566 .3197 .2750 .1591 .0242 .0353 .0887 .2071 .3338 .3193 .2146 .1037  
 165.000 .2466 .3262 .2850 .1663 .0427 .0472 .1465 .0169 .2145 .1417 .1032 .0485  
 180.000 .0611 .6288 .1813 .2387 .3282 .2850 .1663 .0513 .0472 .1465 .0938 .2539 .1408 .1280 .0498  
 270.000 .8172 .2377

X/LT .7480 .8530 .9280

PMI

.000 -.0449 -.0976 -.4570  
 30.000 -.0464 -.0845 -.4257  
 60.000 -.0422 -.0376 -.2600  
 90.000 .0028 .0224  
 120.000 .0126 .0484 .0472  
 135.000 .0091 .0203 .1322  
 150.000 -.0664 .0973 .2427  
 165.000 .0077 .0192 .0013  
 180.000 .0074 .0288 .2639







ARC11-716 1A14 0X712+512M3+AT11 EXTERNAL TANK (R81734)

ALPHAT ( 9 ) = 7.940 BETA\* ( 1 ) = -0.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .7400 .8330 .9200

PMI

.000	-.0703	-.1231	-.4850
30.000	-.0077	-.0319	-.4110
60.000	.0240	.0151	-.1593
90.000	.0361	.0145	
120.000	.1175	.0817	.0286
150.000	.1321	.1067	.0567
180.000	.0654	.0365	-.0084
190.000	.0905	.0676	.0937
195.000	.0648	.0350	-.1760

ALPHAT ( 9 ) = 7.960 BETA\* ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

V/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PMI

.000	.9142	.8889	.9029	.9302	-.1945	-.1942	-.1336	-.0363	.0008	-.0112	-.0115	-.0126	-.0128	-.0149	-.0094
30.000		.5392	.0661	.0661	-.1638	-.1809	-.0902	.0097	.0371	-.0180	-.0007	.0052	.0073	-.0061	.0033
60.000		.4810	.0166	.0166	-.1582	-.1383	-.0393	.0914	.1455	-.0930	-.0181	.0192	.0182	.0032	.0026
90.000	.7374	.3492	-.0856	-.0856	-.2169	-.1783	-.0444	.0968	.1461	-.0797	.0326	-.0176	-.0239	.0023	
120.000		.2759	-.2171	-.2171	-.3134	-.2900	-.1942	-.1097	-.1489	-.2558	-.3628	-.0744	-.0308	-.0190	.0175
150.000								-.1157		-.0909		-.0940		-.0352	
180.000		.1159	-.2894	-.3638	-.3527	-.2301	-.1121	-.0461	.1031	.0355	.0355	-.1885	-.1414	-.1038	-.0379
190.000	.8142	.4807	.0509	-.3381	-.3526	-.3236	-.1963	.0195	.1425	.0697	.0697	-.1084	-.1017	-.0665	.0106
195.000		.5264		-.3228	-.3567	-.3047	-.1679	-.0479	.0424	.1555	.0949	-.2631	-.1131	-.0803	-.0151

V/LT .7400 .8330 .9200

PMI

.000	-.0229	-.0744	-.4473
30.000	.0011	-.0373	-.3942
60.000	.0091	-.0022	-.2072
90.000	.0371	.0145	
120.000	.0815	.0311	.0258
150.000	.0496	.0791	.0032
180.000	.0589	.0326	-.0376
190.000	.0916	.0665	.0766
195.000	.0893	.0445	-.1776



TABLE A-10. PRESSURE DATA - 1A14A - VOL. 9

(901734)

REF ID: A64012541: EXTERNAL TAX

7.905 86' 3" =

1000

130

[illegible][illegible]

1,000	-0.0046	-0.0004	-0.0295
30,000	-0.0059	-0.0461	-0.4085
60,000	-0.0027	-0.0257	-0.2407
90,000	-0.0267	-0.0032	
21,000	-0.0012	-0.0294	-0.0269
35,000	-0.0555	-0.026	-0.0677
50,000	-0.0377	-0.0162	-0.0226
65,000	-0.0645	-0.0337	-0.000
80,000	-0.0011	-0.0572	-0.0595

$$\mu_{AV}(S) = 7.97 \quad BE^*A^* (4) = 4.120$$

DEPENDENT VARIABLE: CPE

ENTER-A-TRAK

[illegible]

ARC11-716 1A14 01+Y13+S12N25+AT11 EXTERNAL TANK

(R81T34)

ALPHA ( 5 ) = 7.970 BETA ( 4 ) = 4.120

## DEPENDENT VARIABLE C'

## SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI  
 .000 -.0239 -.0771 -.4442  
 30.000 -.0349 -.0715 -.4192  
 60.000 -.0126 -.0324 -.2555  
 90.000 .0089 -.0053  
 120.000 .0373 -.0113 -.0411  
 135.000 .0320 .0119 -.1193  
 150.000 -.0238 -.0646 -.2110  
 165.000 .0342 .0112 .0175  
 180.000 .0324 -.0012 -.2511

ALPHA ( 5 ) = 7.960 BETA ( 5 ) = 8.240

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1700 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 .8908 .8165 .4525 .0305 -.2221 -.2355 -.1703 -.0768 -.0488 -.0609 -.0587 -.0619 -.0586 -.0640 -.0574  
 30.000 .2651 -.1802 -.3240 -.3102 -.2191 -.1016 -.0393 -.0753 -.0967 -.0967 -.0783 -.0843 -.0843 -.0780  
 60.000 .0962 -.2996 -.3431 -.2876 -.1602 .0202 .1363 -.0851 -.0699 -.0237 -.0307 -.0289 -.0278  
 90.000 .3973 .0049 -.3451 -.3097 -.2341 -.0638 .1151 .1970 -.1287 -.0126 -.0430 -.0607 -.0437  
 120.000 -.0311 -.3636 -.3155 -.2523 -.1141 -.0101 -.0115 -.1821 -.2255 -.1452 -.1062 -.0884 -.0543  
 135.000 .0204 -.3702 -.3378 -.2876 -.1554 -.0294 -.0184 -.0435 -.0566 -.2873 -.3722 -.2641 -.2066 -.1394  
 165.000 .0306 .4121 .0348 -.3477 -.3820 -.3346 -.1917 -.0951 .0170 .0986 -.0696 -.1945 -.1814 -.1556 -.0804  
 180.000 .8499  
 270.000 .1609

X/LT .7460 .8530 .9280

PHI  
 .000 -.0706 -.1216 -.4630  
 30.000 -.0792 -.0989 -.4248  
 60.000 -.0322 -.0365 -.0482  
 90.000 -.0211 -.0069  
 120.000 .0034 -.0212 -.0477  
 135.000 .0028 .0057 -.1313  
 150.000 -.0745 -.1037 -.2598  
 165.000 -.0148 -.0312 .0073  
 180.000 -.0340 -.0719 -.2769

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DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4747

ARC11-716 1A14 01+112+512N25+AT11 EXTERNAL TANK (RB1735) ( 14 FEB 74 )

## REFERENCE DATA

SRPF = 2.4210 50. FT. XMRP = 29.5800 INCHES  
 LREF = 38.7190 INCHES YMRP = .0000 INCHES  
 BRPF = 38.7190 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT ( 1 ) = -8.470 BETAT ( 1 ) = -8.100

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	0.000	0.080	0.490	1.130	1.780	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.380
CHI															
.000	.8933	.4482	.0393	-.3983	-.4708	-.4149	-.2715	-.1597	-.1273	-.1719	-.1975	-.1493	-.1033	-.0933	-.0811
30.000	.1353	-.3209	-.4694	-.4467	-.3333	-.2438	-.2560	-.3246	-.3342	-.1921	-.1228	-.1169	-.0999		
60.000	.3049	-.1679	-.3324	-.3250	-.2499	-.1901	-.3144	-.4696	-.6756	-.1845	-.0260	-.0419	-.0524		
90.000	.8807	.4965	.0184	-.1837	-.1441	-.0062	.1363	.1623	.1823	-.7059	-.5745	-.2199	-.1423	-.1233	
120.000		.6261	.1478	-.0898	-.0716	.0312	.1892	.2735	.0511	.0494	.0187	-.0056	.0053	.0308	
135.000							.1323	.1758	.1758	-.0152	-.0134				
150.000			.6508	.1669	-.0859	-.0794	-.0018	.1244	.1974	.3116	.1962	-.1187	-.1608	-.1312	-.0631
165.000			.1241	-.1279	-.1279	-.0397	.0740	.1677	.2862	.1623	-.1541	-.1438	-.1298	-.0403	
180.000	.8933	.9374	.5761	.0559	-.1764	-.1709	-.0759	.1356	.2480	.0944	-.4442	-.2042	-.1815	-.0891	
270.000		.4587						.1950							

X/LT .7460 .8530 .9280

## CHI

.000 -.0859 -.1368 -.4776  
 30.000 -.1082 -.1376 -.4427  
 60.000 -.0663 -.0987 -.2334  
 90.000 -.2054 -.3229  
 120.000 .0334 -.1525 .1437  
 135.000 .0553 -.0279 .1290  
 150.000 -.0153 -.0261 -.0369  
 165.000 .0081 -.0111 .1837  
 180.000 -.0342 -.0437 -.1263

ALPHAT ( 1 ) = -8.430 BETAT ( 2 ) = -4.050

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	0.000	0.080	0.490	1.130	1.780	1.940	2.150	2.420	2.900	3.440	3.940	4.510	5.050	5.580	6.380
CHI															
.000	.9502	.5561	.0769	-.3685	-.4395	-.3804	-.2397	-.1204	-.0986	-.1492	-.1829	-.1328	-.0650	-.0509	-.0540
30.000			.1279	-.3297	-.4414	-.4018	-.2762	-.1731	-.1719	-.2513	-.3141	-.1557	-.0863	-.0799	-.0705
60.000			.2351	-.2364	-.3769	-.3278	-.2337	-.1480	-.2552	-.4108	-.6676	-.2399	-.0334	-.0373	-.0439
90.000	.7925	.3961	-.0883	-.2503	-.1977	-.0403	.1234	.1583	.1583	-.6487	-.5983	-.2062	-.1194	-.0881	
120.000		.5247	.0406	-.1600	-.1315	-.0057	.1565	.2628	.0333	-.0765	-.0546	-.0639	-.0410	-.0025	
135.000							.1249	.1885	.1503	-.0741	-.0529				
150.000		.5920	.1047	-.1310	-.1234	-.0294	.1785	.1885	.2750	.0267	-.0669	-.1772	-.1425	-.0813	

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(RB1135)

ARC11-716 IA14 OA+T12+S12N25+AT11 EXTERNAL TANK

ALPHA\*(1) = -8.430 BETAT (2) = -4.050

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI															
161.000				.1032	-.1332	-.1273	-.0366	.0848	.1759	2898	.1244	-.2391	-.1697	-.1205	-.0403
180.000	.9902	.9791	.5631	.0741	-.1559	-.1474	-.0426	.0774	.1617	.2724	.1244	-.5716	-.1747	-.1348	-.0652
270.000	.5752								.1722						

X/LT .7460 .8530 .9280

PHI

.000	-.0660	-.1131	-.4491
30.000	-.0726	-.1116	-.4456
60.000	-.0326	-.0779	-.2481
90.000	-.1137	-.1778	
120.000	.0191	-.1929	.0919
135.000	.0179	-.0652	.0679
150.000	-.0437	-.0728	-.0942
165.000	-.0055	-.0363	.1253
180.000	-.0161	-.0572	-.1496

ALPHA\*(1) = -8.420 BETAT (3) = .010

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI															
.000	.9789	.5257	.0874	-.3542	-.4191	-.3693	-.2305	-.1039	-.0830	-.1370	-.1767	-.1189	-.0469	-.0280	-.0271
30.000			.1044	-.3405	-.4236	-.3701	-.2300	-.1147	-.1099	-.2013	-.2765	-.1310	-.0542	-.0558	-.0481
60.000			.1634	-.2956	-.3861	-.3258	-.1955	-.0996	-.1909	-.3550	-.6314	-.2434	-.0369	-.0333	-.0363
90.000		.6928	.2724	-.1968	-.3056	-.2308	-.0542	.1215	.1693		-.6125	-.5622	-.1829	-.0889	-.0372
120.000			.4062	-.0689	-.2371	-.1950	-.0431	.1274	.2550	.0234	-.0561	-.1242	-.0993	-.0601	-.0209
135.000								.0923		.1192		-.1460		-.0850	
150.000			.5136	.0266	-.1876	-.1692	-.0685	.0791	.1753	.2354	-.1211	-.3572	-.2824	-.1972	-.1249
165.000				.0698	-.1615	-.1536	-.0582	.0770	.1755	.2800	.0574	-.2747	-.1754	-.1266	-.0320
180.000	.9789	.9815	.5689	.0803	-.1532	-.1436	-.0339	.0868	.1823	.2736	.1327	-.5622	-.1747	-.1191	-.0409
270.000	.6994								.1552						

X/LT .7460 .8530 .9280

PHI

.000	-.0414	-.1047	-.4329
30.000	-.0525	-.0976	-.4106
60.000	-.0475	-.0706	-.2606
90.000	-.0740	-.1087	
120.000	-.0095	-.1753	-.0075
135.000	-.0177	-.0854	-.0867
150.000	-.0984	-.1322	-.2561



ARC11-716 IAI4 DE+712+S12N25+AT11 EXTERNAL TANK

(R81735)

ALPHAT ( 1 ) = -0.420 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

CHI

30.000 -.0218 -.0716 .0404  
 60.000 -.0121 -.0629 -.0013  
 90.000

ALPHAT ( 1 ) = -0.430 BETAT ( 4 ) = 4.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

CHI

.000 .9549 .5033 .0753 -.3675 -.4323 -.3819 -.2448 -.1236 -.0892 -.1496 -.1872 -.1284 -.0681 -.0519 -.0907  
 30.000 .0638 -.3683 -.4174 -.3540 -.2039 -.0933 -.0727 -.1568 -.2450 -.1481 -.0417 -.0386 -.0482  
 60.000 .0922 -.3614 -.3861 -.3219 -.1569 -.0521 -.1294 -.3158 -.6064 -.2185 -.0333 -.0322 -.0364  
 90.000 .5764 .1591 -.2933 -.3612 -.2485 -.0558 .1220 .1859 -.6078 -.5279 -.1569 -.0680 -.0417  
 120.000 .2726 -.1855 -.3080 -.2467 -.0873 .0969 .2453 .0102 -.1027 -.1680 -.1231 -.0847 -.0488  
 150.000 .4078 -.0690 -.2553 -.2284 -.1225 .0269 .1412 .1699 -.2743 -.4876 -.3257 -.2362 -.1584  
 180.000 .9549 .9741 .5801 .0234 -.2010 .1900 -.0844 .0420 .2369 .0012 -.3743 -.1839 -.1901 -.0858  
 270.000 .7966 .1688 -.1636 -.1314 -.0459 .0695 .1675 .2465 .1204 -.4951 -.1865 -.1622 -.0773  
 .1483

X/LT .7460 .8330 .9280

CHI

.000 -.0574 -.1130 -.4384  
 30.000 -.0539 -.1000 -.4151  
 60.000 -.0499 -.0735 -.2762  
 90.000 -.0504 -.0897  
 120.000 -.0478 -.1680 -.0754  
 150.000 -.0544 -.1143 -.1826  
 180.000 -.1448 -.2020 -.3091  
 270.000 -.0470 -.1013 -.0170  
 .0523 -.0892 -.2643

(RB1735)

ARC11-716 1A14 CA+112+S12N25+AT11 EXTERNAL TANK

ALPHAT (1) = -8.456 BETAT (5) = 8.170

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	.9591	.4427	.0343	-.4313	-.4700	-.4149	-.2746	-.1617	-.1321	-.1721	-.1952	-.1544	-.1051	-.0905	-.0811
30.000			-.0028	-.4168	-.4104	-.3414	-.1850	-.0639	-.0462	-.1401	-.2222	-.1380	-.0547	-.0529	-.0639
60.000			-.0004	-.4053	-.3596	-.2746	-.1249	-.0139	-.0727	-.2746	-.6060	-.2138	-.0333	-.0420	-.0491
90.000		.4571	.0429	-.3751	-.3607	-.2472	-.0486	.1275	.2013		-.6099	-.4611	-.1225	-.0568	-.0423
120.000			.1501	-.2910	-.3572	-.2966	-.1249	.0730	.2325	-.0969	-.1386	-.1995	-.1678	-.1378	-.1090
135.000							.0010			.0285		-.2827		-.1941	
150.000			.2985	-.1683	-.3275	-.2317	-.1754	-.0218	.0922	.0857	-.3694	-.8561	-.4138	-.2739	-.2153
165.000				-.0425	-.2539	-.2309	-.1338	-.0121	.0948	.1513	-.0767	-.4328	-.2331	-.2200	-.1409
180.000	.8891	.8658	.5230	.0440	-.1907	-.1783	-.0804	.0283	.1237	.1940	.0827	-.3811	-.2798	-.2464	-.1349
270.000		.8781							.1738						

X/LT .7480 .8530 .9280

PHI

.000	-.0850	-.1309	-.4660
30.000	-.0795	-.1222	-.4244
60.000	-.0532	-.0916	-.2964
90.000	-.0565	-.1172	
120.000	-.0924	-.1986	-.0955
135.000	-.0940	-.1377	-.2011
150.000	-.2063	-.2538	-.3164
165.000	-.1111	-.1476	-.0670
180.000	-.1327	-.1629	-.2795

ALPHAT (2) = -4.370 BETAT (1) = -8.180

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	.9625	.5741	.1809	-.3064	-.4336	-.3959	-.2706	-.1507	-.1280	-.1673	-.1733	-.1274	-.0980	-.0926	-.0880
30.000			.2732	-.2030	-.3956	-.3789	-.2706	-.1701	-.1874	-.2571	-.2539	-.1372	-.1127	-.1058	-.0840
60.000			.4153	-.0733	-.2765	-.2589	-.1549	-.0657	-.1569	-.3865	-.5683	-.0922	-.0102	-.0265	-.0421
90.000		.9442	.5367	.0909	-.1497	-.1134	.0316	.1905	.2669		-.5598	-.3416	-.1225	-.1007	-.0843
120.000			.5843	.0940	-.1228	-.1027	.0122	.1432	.1903	-.0498	.0034	.0161	-.0076	-.0048	.0252
135.000							.0919			.1164		-.0104		-.0200	
150.000			.5519	.0642	-.1613	-.1566	-.0702	.0622	.1243	.2682	.1528	-.1367	-.1665	-.1339	-.0378
165.000				.0033	-.2178	-.2071	-.1041	.0171	.1091	.2461	.1379	-.1315	-.1413	-.1249	-.0335
180.000	.9625	.8884	.4170	-.0580	-.2530	-.2351	-.1162	.0066	.0968	.2168	.0847	-.4451	-.1938	-.1805	-.0715
270.000		.5289							.3189						

X/LT .7480 .8530 .9280

PHI



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4731

ARC11-716 1A14 31+112+512N25+AT111 EXTERNAL TANK

(RB11735)

ALPHAT (2) = -4.370 BETAT (1) = -0.150

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI	0.000	0.000	0.000
30.000	-.0839	-.1375	-.4727
60.000	-.0850	-.1153	-.4334
90.000	-.0453	-.0422	-.2070
120.000	-.1222	-.1909	
135.000	-.0736	-.0574	.1624
150.000	.075	.0339	.1525
165.000	.0135	.0250	.0071
180.000	.0401	.0390	.2020
270.000	.0085	.0018	-.1084

ALPHAT (2) = -4.370 BETAT (2) = -4.070

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI	0.000	1.0220	.6302	.1972	-.2808	-.4059	-.3709	-.2345	-.1154	-.0969	-.1440	-.1420	-.1029	-.0694	-.0561	-.0481
30.000				.2512	-.2281	-.3875	-.3593	-.2313	-.1275	-.1344	-.2294	-.2100	-.1186	-.0818	-.0773	-.0587
60.000				.3389	-.1527	-.3125	-.2832	-.1558	-.0436	-.1206	-.3754	-.5514	-.0864	-.0340	-.0301	-.0339
90.000			.8563	.4252	-.0596	-.2215	-.1682	-.0015	.1754	.2725	-.3767	-.0336	-.0272	-.0496	-.0347	
120.000			.4341	-.0033	-.1906	-.1587	-.0194	.1269	.1993	-.0626	-.0151	-.0275	-.0582	-.0433	-.0151	
135.000					.0094	-.1968	-.1820	-.0777	.0592	.1339	.2387	.0384	-.0941	-.1752	-.1460	-.0774
150.000					-.0099	-.2171	-.2005	-.0916	.0405	.1295	.2520	.1239	-.2257	-.1712	-.1291	-.0388
165.000		1.0220	.8953	.4488	-.0402	-.2345	-.2127	-.0624	.0402	.1253	.2394	.1214	-.5276	-.1699	-.1338	-.0597
270.000		.6448								.2912						

X/LT .7460 .8330 .9280

PHI	0.000	0.000	0.000
30.000	-.0527	-.0956	-.4495
60.000	-.0565	-.0914	-.4249
90.000	-.0369	-.0534	-.2328
120.000	-.0133	-.0809	
135.000	.0312	-.1017	.0834
150.000	.0375	-.0924	.0834
165.000	-.0134	-.0223	-.0401
180.000	.022	.0567	.1294
270.000	.0079	-.0149	-.1334

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ARC11-716 IA14 Q1+T12+S12N25+AT111 EXTERNAL TANK (RB1735)

ALPHAT( 2 ) = -4.360 BETAT ( 3 ) = .010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0420	.6487	.2034	-.2684	-.3960	-.3584	-.2275	-.1056	-.0826	-.1290	-.1241	-.0885	-.0569	-.0464	-.0390
30.000			.2144	-.2629	-.3849	-.3443	-.2074	-.0884	-.0895	-.1856	-.1703	-.0962	-.0728	-.0622	-.0418
60.000			.2493	-.2253	-.3306	-.2781	-.1452	-.0184	-.0840	-.4090	-.5153	-.1210	-.0435	-.0345	-.0292
90.000		.7549	.3086	-.1658	-.2778	-.2043	-.0168	.1710	.2797		-.3068	.0070	-.0295	-.0329	-.7421
120.000			.3761	-.1035	-.2499	-.2032	-.0479	.1149	.2002	-.0737	-.0453	-.0645	-.0864	-.0702	-.0287
135.000								.0708		.0752	-.1226			-.0858	
150.000			.4309	-.0554	-.2369	-.2385	-.0953	.0542	.1348	.2016	-.1201	-.3132	-.2598	-.1918	-.1172
165.000				-.0329	-.2293	-.2097	-.0908	.0384	.1364	.2447	.0581	-.2569	-.1702	-.1300	-.0532
180.000	1.0420	.8918	.4590	-.0348	-.2338	-.2103	-.0802	.0421	.1454	.2400	.1302	-.4707	-.1625	-.1176	-.0411
270.000		.7560						.2744							

X/LT .7460 .8530 .9280

## PHI

.000	-.0424	-.0913	-.4421
30.000	-.0429	-.0775	-.4196
60.000	-.0305	-.0498	-.2634
90.000	-.0197	-.0371	
120.000	.0016	-.1132	-.0114
135.000	.0050	-.0421	-.0586
150.000	-.0686	-.0730	-.2219
165.000	-.0008	-.0250	.0257
180.000	.0070	-.0179	-.1221

ALPHAT( 2 ) = -4.370 BETAT ( 4 ) = 4.090

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0170	.6261	.1889	-.2780	-.4128	-.3711	-.2407	-.1256	-.1020	-.1480	-.1394	-.1042	-.0723	-.3576	-.0505
30.000			.1603	-.3059	-.3963	-.3404	-.1975	-.0778	-.0226	-.1654	-.1545	-.0986	-.0682	-.0501	-.0497
60.000			.1598	-.2975	-.3505	-.2803	-.1278	.0055	-.0312	-.3914	-.4430	-.1481	-.0674	-.0487	-.0336
90.000		.6371	.1953	-.2646	-.3099	-.2144	-.0167	.1757	.2981		-.2899	.0131	-.0482	-.0702	-.0806
120.000			.2565	-.2012	-.3061	-.2392	-.0714	.1032	.2046	-.0898	-.0883	-.1036	-.1075	-.0864	-.0464
135.000								.0515		.0410		-.1641		-.1256	
150.000			.3474	-.1312	-.2941	-.2563	-.1249	.0255	.1195	.1488	-.2449	-.4579	-.3366	-.2455	-.1344
165.000				-.0744	-.2678	-.2392	-.1188	.0170	.1148	.2124	.0009	-.3437	-.1796	-.1283	-.0738
180.000	1.0170	.8905	.4462	-.0433	-.2462	-.2194	-.0945	.0239	.1245	.2209	.1198	-.4464	-.1823	-.1662	-.0709
270.000		.8560						.2650							

X/LT .7480 .8530 .9280

## PHI

.000	-.0424	-.0913	-.4421
30.000	-.0429	-.0775	-.4196
60.000	-.0305	-.0498	-.2634
90.000	-.0197	-.0371	
120.000	.0016	-.1132	-.0114
135.000	.0050	-.0421	-.0586
150.000	-.0686	-.0730	-.2219
165.000	-.0008	-.0250	.0257
180.000	.0070	-.0179	-.1221



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1735)

ASC11-716 1A14 01+T12+512K25+AT11 EXTERNAL TANK

ALPHAT ( 2 ) = -4.370 BETAT ( 4 ) = 4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8530 .9280

PHI

.000	-.0555	-.0999	-.4414
30.000	-.0488	-.0850	-.4274
60.000	-.0317	-.0540	-.2729
90.000	-.0348	-.0601	
120.000	-.0233	-.1266	-.0592
135.000	-.0280	-.0704	-.1460
150.000	-.1190	-.1470	-.2772
165.000	-.0273	-.0532	-.0033
180.000	-.0236	-.0497	-.2413

ALPHAT ( 2 ) = -4.380 BETAT ( 5 ) = 8.190

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PHI

.000	.9572	.9636	.1905	-.3089	-.4400	-.4015	-.2777	-.1568	-.1295	-.1681	-.1732	-.1275	-.1044	-.0936	-.0941
30.000			.0816	-.3583	-.4131	-.3488	-.1991	-.0697	-.0429	-.1509	-.1565	-.1018	-.0763	-.0769	-.0693
60.000			.0683	-.3565	-.3467	-.2676	-.0984	.0361	.0104	-.3614	-.3804	-.1677	-.0808	-.0644	-.0465
90.000		.5209	.0840	-.3465	-.3154	-.2136	-.0040	.1789	.3174		-.2438	.0148	-.0642	-.0984	-.1031
120.000			.1479	-.2984	-.3379	-.2622	-.0868	.0941	.1999	-.1015	-.1250	-.1378	-.1444	-.1329	-.0992
135.000								.0256		.0116		-.2225		-.1778	
150.000			.2426	-.2241	-.3433	-.2932	-.1634	-.0109	.0967	.0834	-.3434	-.5062	-.3838	-.2901	-.1844
165.000				-.1327	-.3079	-.2717	-.1337	-.0276	.0771	.1399	-.0774	-.3817	-.2210	-.2124	-.1298
180.000	.9572	.8067	.4152	-.0701	-.2712	-.2436	-.1155	-.0111	.0925	.1638	.0784	-.3478	-.2715	-.2290	-.1350
270.000		.9484							.2633						

K/LT .7460 .8530 .9280

PHI

.000	-.0891	-.1366	-.4559
30.000	-.0640	-.0929	-.4005
60.000	-.0493	-.0808	-.2443
90.000	-.0962	-.1361	
120.000	-.0685	-.1480	-.0848
135.000	-.0630	-.0792	-.1624
150.000	-.1480	-.1796	-.2754
165.000	-.0748	-.0892	-.0258
180.000	-.0911	-.1103	-.2599

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ARC11-719 IAI4 OL+T12+S12+29+AT11 EXTERNAL TANK

(RB1T55)

ALPHAT ( 3 ) = -.520 BETAT ( 1 ) = -0.200

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6180
PMI															
.000	.9828	.6739	.2633	-.2173	-.4027	-.3782	-.2594	-.1466	-.1145	-.1497	-.1471	-.1239	-.1019	-.0945	-.0911
30.000			.3915	-.0967	-.3292	-.3172	-.2194	-.1217	-.1271	-.2134	-.1752	-.1109	-.0898	-.0855	-.0657
60.000			.5068	.0109	-.2090	-.1908	-.0928	.0146	-.0325	-.3686	-.3970	-.0560	-.0042	-.0107	-.0072
90.000		.9734	.5625	.0658	-.1400	-.1050	.0517	.2107	.3112		-.4155	.0676	-.0063	-.0283	-.0075
120.000			.5280	.0428	-.1729	-.1491	-.0332	.0863	.0965	-.1454	.0071	.0605	-.0026	-.0120	.0221
150.000								.0285		.0579		.0230		-.0230	
180.000			.4506	-.0401	-.2451	-.2272	-.1355	.0030	.0508	.2215	.1294	-.0921	-.1664	-.1175	-.0404
210.000				-.1091	-.3022	-.2742	-.1526	-.0786	.0616	.2134	.1292	-.1279	-.1473	-.1222	-.0183
240.000	.9828	.7767	.3055	.1628	.3227	.2838	-.1510	-.0207	.0634	.1990	.0811	-.4084	-.1916	-.1672	-.0650
270.000		.5356													.3717

X/LT .7460 .8530 .9280

PMI

.000	-.0922	-.1380	-.4543												
30.000	-.0631	-.0939	-.4219												
60.000	-.0042	-.0125	-.2156												
90.000	.0237	-.0117													
120.000	.0651	.0192	.1421												
150.000	.0932	.0624	.1403												
180.000	.0436	.0557	.0377												
210.000	.0691	.0705	.2034												
240.000	.0331	.0359	-.0963												

ALPHAT ( 3 ) = -.410 BETAT ( 2 ) = -4.030

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6180
PMI															
.000	1.1450	.7396	.3078	-.1886	-.3689	-.3470	-.2201	-.1014	-.0752	-.1175	-.1128	-.0845	-.0656	-.0537	-.0422
30.000			.3694	-.1300	-.3314	-.3079	-.1928	-.0808	-.0793	-.1765	-.1495	-.0880	-.0684	-.0588	-.0414
60.000			.4229	-.0740	-.2589	-.2235	-.1030	.0255	-.0080	-.3683	-.3836	-.0888	-.0241	-.0178	-.0138
90.000		.8828	.4450	-.0438	-.2128	-.1605	.0208	.1586	.3181		-.4816	.0254	-.0480	-.0884	-.0412
120.000			.4381	-.0457	-.2246	-.1894	-.0512	.0847	.1137	-.1601	-.0303	.0028	-.0532	-.0589	-.0181
150.000								.0404		.0468		-.0531		-.0629	
180.000			.4034	-.0813	-.2631	-.2345	-.1838	.0204	.0789	.2005	.0788	-.1217	-.1768	-.1481	-.0624
210.000				-.1159	-.2863	-.2558	-.1325	-.0007	.0889	.2246	.1214	-.1928	-.1473	-.1217	-.0231
240.000	1.0450	.7926	.3388	-.1482	-.3009	-.2688	-.1238	.0086	.0960	.2140	.1193	-.4662	-.1588	-.1899	-.0308
270.000		.6819													

X/LT .7480 .8530 .9280

PMI

DATE 16 JAN 75 TABULATED PRESSURE DATA - IAI14A - VOL. 9

(R81135)

APC11-716 IAI14 DI-10-012125\*AT11: EXTERNAL TANK

ALPHAT (3) = -.510 BETAT (2) = -.4090

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .9330 .9230

THI

.000 -.0475 -.0912 -.4287  
30.000 -.0346 -.0482 -.4033  
60.000 -.0083 -.0154 -.2310  
90.000 .0125 .0383  
120.000 .0472 -.0225 .0784  
135.000 .0612 .0488 .0923  
150.000 .0239 .0196 -.0176  
165.000 .0322 .0492 .1440  
180.000 .0363 .0298 -.1198

ALPHAT (3) = -.510 BETAT (3) = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5380 .6380

THI

.000 1.0650 .7521 .3134 -.1796 -.3555 -.3287 -.2081 -.0880 -.0609 -.1052 -.1013 -.0788 -.0549 -.0398 -.0261  
30.000 .3207 -.1739 -.3479 -.3121 -.1845 -.0624 -.0441 -.1467 -.1304 -.0783 -.0539 -.0470 -.0348  
60.000 .0217 -.1613 -.2979 -.2480 -.1069 .0348 .0213 .3580 .3561 .1191 .0478 .0380 .0269  
90.000 .7830 .3320 .1521 -.2618 -.1964 .0057 .1343 .3317 .4546 .0020 .0839 .0958 .0570  
120.000 .3377 .1479 .2696 .1220 .0637 .0901 .1039 .1635 .0621 .0504 .0874 .0773 .0320  
135.000 .3531 .1574 .2893 .2475 .1206 .0271 .0955 .1694 .1230 .12619 .2283 .1824 .1009  
150.000 .1339 .2945 .2537 .1219 .0111 .1047 .2212 .0321 .2425 .1622 .1296 .0443  
165.000 1.0850 .7963 .3487 .1347 .3015 .2579 .1125 .0123 .1063 .2141 .1292 .4352 .1529 .1116 .0291  
180.000 .7735

K/LT .7460 .9330 .9280

THI

.000 -.0317 -.0772 -.4190  
30.000 -.0275 -.0590 -.4050  
60.000 -.0165 -.0243 -.2901  
90.000 .0003 .0043  
120.000 .0242 -.0614 .0181  
135.000 .0261 .0040 .0272  
150.000 -.0295 .0329 .1608  
165.000 .0257 .0102 .0476  
180.000 .0289 .0139 .1858

ARC11-716 1A14 01+112+512+25+AT111 EXTERNAL TANK (RB1755)

ALPHAT(3) = -.900 BETAT(4) = 4.090

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.0490	.7324	.2966	-.1901	-.3737	-.3418	-.2232	-.1022	-.0768	-.1258	-.1153	-.0926	-.0645	-.0327	-.0432
30.000			.2413	-.2323	-.3781	-.3304	-.1865	-.0608	-.0322	-.1433	-.1371	-.0916	-.0706	-.0334	-.0428
60.000			.2161	-.2531	-.3377	-.2695	-.1076	.0460	.0488	-.3422	-.3273	-.1472	-.0745	-.0332	-.0410
90.000		.6634	.2109	-.2558	-.3107	-.2136	-.0943	.2043	.3502	-.3874	-.3874	-.0315	-.067	-.1115	-.0635
120.000			.2306	-.2334	-.3054	-.2362	-.0713	.0928	.1541	-.1614	-.0930	-.0926	-.1136	-.0977	-.0501
135.000							.0422			.0127	-.1488			-.1234	
150.000			.2691	-.1959	-.3216	-.2638	-.1350	.0178	.0966	.1311	-.2136	-.4055	-.3270	-.2403	-.1246
165.000				-.1698	-.3182	-.2739	-.1445	-.0067	.0906	.1951	-.0039	-.3182	-.1679	-.1269	-.0648
180.000	1.0430	.7995	.3367	-.1487	-.3057	-.2638	-.1329	-.0035	.0919	.1937	.1163	-.4056	-.1716	-.1595	-.0656
270.000		.6607													
K/LT	.7400	.6530	.9280												

ALPHAT(3) = -.900 BETAT(5) = 6.160

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.9809	.5722	.2573	-.2212	-.4078	-.3794	-.2609	-.1446	-.1106	-.1599	-.1510	-.1260	-.1040	-.0937	-.0907
30.000			.1575	-.3075	-.4119	-.3513	-.2071	-.0742	-.0372	-.1371	-.1470	-.1082	-.0791	-.0712	-.0629
60.000			.1143	-.3373	-.3564	-.2708	-.0990	.0624	.0707	-.3224	-.2788	-.1551	-.0823	-.0624	-.0488
90.000		.5398	.0946	-.3342	-.3136	-.2092	.0045	.2128	.3714	-.3490	-.0993	-.1374	-.1436	-.1029	
120.000			.1190	-.3109	-.3279	-.2469	-.0689	.0976	.1608	-.1647	-.1316	-.1261	-.1907	-.1432	-.0965
135.000							.0412			-.0063	-.1916			-.1671	
150.000			.1775	-.2787	-.3551	-.2950	-.1509	.0009	.0885	.0852	-.3373	-.4436	-.3886	-.2435	-.1783
165.000				-.2223	-.3491	-.3059	-.1726	-.0391	.0560	.1350	-.0806	-.3446	-.2119	-.2105	-.1159
180.000	.9809	.6780	.3088	-.1758	-.3262	-.2903	-.1551	-.0433	.0523	.1490	.0777	-.3340	-.2739	-.2298	-.1296
270.000		.9743													
K/LT	.7400	.6530	.9280												

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - WL. 9

(RB1135)

ARC11-716 1A14 D1+T12+S12X25+AT11 EXTERNAL TANK

ALPHAT ( 3 ) = -.900 BETAT ( 5 ) = 8.180

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PHI  
 .000 -.0960 -.1366 -.4481  
 30.000 -.0629 -.0885 -.4074  
 60.000 -.0529 -.0584 -.2488  
 90.000 -.0731 -.0711  
 120.000 -.0417 -.0867 -.0592  
 135.000 -.0364 -.0428 -.1343  
 150.000 -.1236 -.1376 -.2453  
 165.000 -.0497 -.0534 .0032  
 180.000 -.0706 -.0766 -.2406

ALPHAT ( 4 ) = 3.980 BETAT ( 1 ) = -8.200

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5070 .5580 .6380

PHI  
 .000 .9681 .7865 .3849 -.1062 -.3326 -.3214 -.2308 -.1078 -.0755 -.1029 -.0386 -.0879 -.0810 -.0834 -.0796  
 30.000 .5167 .0185 -.2350 -.2324 -.1476 -.0459 -.0787 -.0571 -.0453 -.0507 -.0411  
 60.000 .5825 .0654 -.1494 -.1325 -.0321 .0946 .0872 -.2551 -.1106 -.0238 -.0093 -.0017 .0064  
 90.000 .9521 .5492 .0507 .1450 .1140 .0375 .1983 .2909 -.5773 -.0414 -.0369 -.0382 -.0103  
 120.000 .4333 -.0525 -.2350 -.2207 -.1078 -.0563 -.0367 .0117 .0069 .0483  
 135.000 .3174 -.1611 -.3357 -.3087 -.2013 -.0755 -.0282 .1690 .0764 -.1099 -.1324 -.1022 -.0227  
 150.000 .2262 -.3732 -.3350 -.2026 -.0747 .0103 .1800 .1020 .1256 -.1214 -.1112 .0035  
 165.000 .9481 .6550 .1830 .2704 .3658 .3263 .1663 .0401 .0430 .1710 .0740 .3993 .1745 .1436 -.0416  
 180.000 .5193 .3566

K/LT .7460 .8330 .9280

PHI  
 .000 -.0017 -.1251 -.4346  
 30.000 -.0364 -.0626 -.3672  
 60.000 .0172 .0200 .1450  
 90.000 .0188 -.0264  
 120.000 .1224 .0832 .1598  
 135.000 .1316 .1308 .1587  
 150.000 .0808 .0858 .0726  
 165.000 .1024 .1092 .2106  
 180.000 .0887 .0729 -.0064

ORIGINAL PA  
 OF FOUR QUALITY

ARC11-716 IAI4 OA-712-S12N25-AT11 EXTERNAL TANK (R01135)

ALPHAT ( 4 ) = 3.980 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
.000	1.0300	.8553	.4367	-.0522	-.3034	-.2991	-.1841	-.0638	-.0290	-.0556	-.0584	-.0472	-.0472	-.0403	-.0323
30.000			.4829	-.0248	-.2603	-.2514	-.1491	-.0224	-.0048	-.0996	-.0562	-.0419	-.0366	-.0371	-.0245
60.000			.4842	-.0130	-.2171	-.1844	-.0554	.0865	.1039	-.2077	-.0990	-.0438	-.0429	-.0340	-.0119
90.000		.8574	.4311	-.0574	-.2259	-.1802	.0076	.1824	.2961		-.5573	-.0969	-.0801	-.0567	-.0235
120.000			.3462	-.1261	-.2792	-.2371	-.1129	.0089	-.0064	-.2319	-.2272	-.0464	-.0489	-.0356	.0091
135.000							-.0277		-.0114			-.0980		-.0493	
150.000			.2818	-.1969	-.3317	-.2984	-.1694	-.0371	.0123	.1589	.0598	-.2018	-.1715	-.1306	-.0374
165.000				-.2251	-.3525	-.3096	-.1702	.0306	.0519	.1921	.0984	-.1981	-.1459	-.1088	.0052
180.000	1.0300	.6669	.2143	-.2527	-.3541	-.3018	-.1507	-.0048	.0693	.1903	.1065	-.4597	-.1422	-.1100	-.0161
270.000		.6467							.3303						

K/LT .7480 .8530 .9280

PMI															
.000	-.0298	-.0736	-.3967												
30.000	-.0156	-.0440	-.3685												
60.000	.0036	.0033	-.1982												
90.000	.0196	.0001													
120.000	.0877	.0393	.1169												
135.000	.0929	.0947	.1078												
150.000	.0611	.0647	.0148												
165.000	.0902	.0899	.1445												
180.000	.0758	.0680	-.1145												

ALPHAT ( 4 ) = 3.980 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0280	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
.000	1.0490	.8755	.4417	-.0587	-.2870	-.2786	-.1750	-.0514	-.0163	-.0542	-.0518	-.0364	-.0334	-.0215	-.0160
30.000			.4526	-.0774	-.2916	-.2724	-.1517	-.0267	.0112	-.0355	-.0661	-.0390	-.0336	-.0348	-.0233
60.000			.3770	-.1805	-.2758	-.2308	-.0851	.0777	.1210	-.2687	-.0976	-.0390	-.0313	-.0483	-.0309
90.000		.7570	.3131	-.1574	-.2714	-.1998	-.0097	.1774	.3065		-.5231	-.1104	-.1045	-.0884	-.0358
120.000			.2584	-.2110	-.3027	-.2471	-.0948	.0311	.0338	-.2356	-.2245	-.1141	-.0979	-.0686	-.0121
135.000							.0008		-.0128			-.1287		-.0678	
150.000			.2333	-.2351	-.3405	-.2836	-.1548	-.0116	.0461	.1352	-.1349	-.2734	-.2038	-.1502	-.0779
165.000				-.2398	-.3457	-.2898	-.1506	-.0184	.0713	.1918	.0465	-.2385	-.1419	-.1085	-.0199
180.000	1.0490	.6888	.2172	-.2458	-.3506	-.2887	-.1398	-.0116	.0794	.1870	.1237	-.4381	-.1310	-.0852	-.0087
270.000		.7832							.3110						

K/LT .7480 .8530 .9280

PMI

DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI44 - VOL. 9

(R01135)

AF011-716 IAI4 210°12-S1212JAT11 EXTERNAL TANK

ALPHAT (4) = 3.980 BETAT (3) = .010

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/Y .7400 .8550 .9280

QHI			
.000	-.0142	-.0562	-.3835
30.000	-.0147	-.0406	-.3789
60.000	-.0082	-.0108	-.2177
90.000	.0110	-.0045	
120.000	.0176	.0071	.0337
150.000	.0501	.0480	-.0012
180.000	.0091	.0094	-.1093
195.000	.0607	.0511	.0401
180.000	.0603	.0540	-.1767

ALPHAT (4) = 3.980 BETAT (4) = 5.135

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/Y .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

QHI														
.000	1.00	.0362	.4193	-.0937	-.3382	-.1992	-.0776	-.0449	-.0765	-.0718	-.0607	-.0528	-.0518	-.0400
30.000			.3132	-.1736	-.3562	-.3278	-.1854	-.0501	-.0054	-.0675	-.0843	-.0610	-.0534	-.0424
60.000			.0279	-.2486	-.3370	-.3274	-.1077	.0735	.1288	-.2525	-.1015	-.0458	-.0587	-.0453
90.000		.6163	.1681	-.2847	-.3175	-.2195	-.0116	.1573	.1340	-.4468	-.1053	-.1052	-.0814	-.0366
120.000			.1411	-.3055	-.3029	-.2572	-.0539	.0838	-.2118	-.2321	-.1709	-.1277	-.0890	-.0339
150.000								.0012	-.0208		-.1675		-.1108	
180.000			.1563	-.2034	-.3474	-.2891	-.1437	.0666	.0973	-.2459	-.4046	-.3214	-.2115	-.1027
195.000			.12910	-.3377		.3112	-.1358	.0634	.1550	-.0265	-.2779	-.1659	-.1288	-.0606
180.000	1.0160	.6688	.1988	-.0422	-.3003	-.2193	-.1674	-.0520	.1663	.1153	-.3329	-.1784	-.1564	-.0688
270.000		.8921						.2981						

X/Y .7400 .8550 .9280

QHI			
.000	-.0441	-.3834	-.4040
30.000	-.0404	-.0658	-.1911
60.000	-.0410	-.3429	-.2480
90.000	-.0073	-.0116	
120.000	.0233	-.0167	-.0078
150.000	.0170	.0068	-.1026
180.000	-.0461	-.0723	-.2347
195.000	.0168	.0057	.0177
180.000	.0139	.0000	-.2105



ARC11-716 1A14 Q1-T12-S12N25-AT11 EXTERNAL TANK (RB1735)

ALPHAT (4) = 3.980 BETAT (5) = 8.220

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6780
PHI	.000	.9636	.7848	.3698	-.1037	-.3305	-.3222	-.2267	-.1120	-.0792	-.1114	-.1029	-.0925	-.0843	-.0813
30.000				.2401	-.2357	-.3963	-.3519	-.2233	-.0768	-.0205	-.1038	-.1087	-.0845	-.0762	-.0786
60.000				.1345	-.3138	-.3664	-.2873	-.1088	.0754	.1438	-.2477	-.1074	-.0555	-.0634	-.0568
90.000				.5185	-.0843	-.3399	-.3190	-.2150	.0010	.1985	-.3609	-.0832	-.0978	-.0793	-.0451
120.000				.0717	-.3468	-.3243	-.2451	-.0679	.0810	.0992	-.2017	-.2416	-.1990	-.1111	-.0533
135.000								.0349		-.0211	-.0211	-.1939	-.1527		
150.000				.0942	-.3466	-.3526	-.2902	-.1411	.0072	.0740	.0742	-.3183	-.4250	-.3365	-.1444
165.000					-.3112	-.3786	-.3186	-.1741	-.0453	.0474	.1270	-.0557	-.2996	-.2107	-.1956
180.000				.9636	.5489	.1789	-.2795	-.3835	-.3290	-.1791	.1249	.0564	-.3167	-.2650	-.2203
270.000				.9594				-.0696							-.1134
								.2934							

X/LT .7480 .6530 .9280

PHI

.000	-.0840	-.1206	-.4290
30.000	-.0633	-.0848	-.3999
60.000	-.0492	-.0323	-.2537
90.000	-.0111	-.0109	
120.000	-.0026	-.0301	.0010
135.000	-.0108	-.0075	-.0996
150.000	-.0806	-.0973	-.2185
165.000	-.0231	-.0242	.0326
180.000	-.0488	-.0519	-.2360

ALPHAT (5) = 7.990 BETAT (1) = -8.200

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI	.000	.9142	.8706	.4959	.0032	-.2687	-.2747	-.2038	-.0703	-.0318	-.0572	-.0604	-.0615	-.0572	-.0615
30.000				.6207	.1284	-.1599	-.1721	-.0964	.0219	.0424	-.0413	-.0134	-.0068	-.0057	-.0058
60.000				.6333	.1407	-.1125	-.1025	.0048	.1471	.1827	-.1366	-.0597	.0406	.0272	.0133
90.000				.8934	.3111	.0360	-.1809	-.1425	.0003	.1900	.2053	-.3188	.0138	-.0247	-.0242
120.000				.3310	-.1420	-.3247	-.3011	-.1953	-.1177	-.1675	-.2553	-.5365	.0219	.0387	.0253
135.000								-.1519		-.0687	-.0687	-.0457	.0050		
150.000				.1927	-.2683	-.4238	-.3826	-.2679	-.1498	-.1038	.0103	-.1642	-.1242	-.0865	-.0097
165.000					-.3470	-.4416	-.3862	-.2357	-.1033	-.0215	.1411	.0815	-.1253	-.0926	-.0934
180.000				.9142	.5255	.0709	-.3771	-.4201	-.3566	-.1785	.1524	.0681	-.3919	-.1323	-.1217
270.000				.4642				-.0412							-.0194
								.2728							

X/LT .7480 .6530 .9280

PHI

.000	-.0840	-.1206	-.4290
30.000	-.0633	-.0848	-.3999
60.000	-.0492	-.0323	-.2537
90.000	-.0111	-.0109	
120.000	-.0026	-.0301	.0010
135.000	-.0108	-.0075	-.0996
150.000	-.0806	-.0973	-.2185
165.000	-.0231	-.0242	.0326
180.000	-.0488	-.0519	-.2360

ARC11-716 1A14 01+T12+S12N25+AT11 EXTERNAL TANK

(R01T35)

```
ALPHAT(5) = 7.395 GETAT(1) = -3.205
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DEPENDENT VARIABLE C/P

SECTION (1) EXTERNAL TANK

X/LT	.7460	.8530	.9280
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30.000	-0.987	-1.094	-4.418
30.000	0.040	-0.250	-3.562
60.000	0.363	0.430	-1.692
90.000	0.623	0.133	
120.000	1.179	1.034	1.541
135.000	1.321	1.566	1.774
150.000	0.999	1.099	1.019
165.000	1.206	1.255	2.254
180.000	0.902	0.091	-0.981

```
ALPHAT( 5) =  8.030  BETAT( 2) = -4.090
```

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
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Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422
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Y/LT	.7460	.8530	.9280
1	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000
3	1.0000	1.0000	1.0000
4	1.0000	1.0000	1.0000
5	1.0000	1.0000	1.0000
6	1.0000	1.0000	1.0000
7	1.0000	1.0000	1.0000
8	1.0000	1.0000	1.0000
9	1.0000	1.0000	1.0000
10	1.0000	1.0000	1.0000
11	1.0000	1.0000	1.0000
12	1.0000	1.0000	1.0000
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14	1.0000	1.0000	1.0000
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19	1.0000	1.0000	1.0000
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25	1.0000	1.0000	1.0000
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31	1.0000	1.0000	1.0000
32	1.0000	1.0000	1.0000
33	1.0000	1.0000	1.0000
34	1.0000	1.0000	1.0000
35	1.0000	1.0000	1.0000
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37	1.0000	1.0000	1.0000
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61	1.0000	1.0000	1.0000
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63	1.0000	1.0000	1.0000
64	1.0000	1.0000	1.0000
65	1.0000	1.0000	1.0000
66	1.0000	1.0000	1.0000
67	1.0000	1.0000	1.0000
68	1.0000	1.0000	1.0000
69	1.0000	1.0000	1.0000
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71	1.0000	1.0000	1.0000
72	1.0000	1.0000	1.0000
73	1.0000	1.0000	1.0000
74	1.0000	1.0000	1.0000
75	1.0000	1.0000	1.0000
76	1.0000	1.0000	1.0000
77	1.0000	1.0000	1.0000
78	1.0000	1.0000	1.0000
79	1.0000	1.0000	1.0000
80	1		

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PHI	-0.000	-0.017	-0.042	-0.3719
30.000	0.010	-0.016	-0.3505	
60.000	0.141	0.069	-0.1946	
90.000	0.442	0.0231		
120.000	0.1039	0.0630	0.1045	
135.000	0.1087	0.1232	0.0977	
150.000	0.0775	0.0667	0.0193	
165.000	0.1104	0.1085	0.1524	
180.000	0.0943	0.0860	-0.1091	

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 Q1+T12+S12Q5+AT11 EXTERNAL TANK

(R81135)

ALPHAT ( 5 ) = 8.040 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9914	.9611	.5528	.0538	-.2068	-.2157	-.1240	-.0123	.0291	-.0040	-.0028	-.0009	.0010	.0081
30.000				.5093	.0086	-.2360	-.2292	-.1193	.0061	.0587	-.0239	-.0170	-.0064	-.0018	-.0079
60.000				.4019	-.0853	-.2716	-.2269	-.0779	.0963	.1309	-.1463	-.0467	.0148	.0000	-.0037
90.000				.6925	.2763	-.1856	-.3046	-.2271	.1370	.2188	-.2320	.0062	-.0462	-.0366	-.0178
120.000				.1701	-.2788	-.3525	-.2895	-.1477	-.0448	-.0717	-.2309	-.4851	-.1209	-.0491	.0025
135.000								-.0514		-.0181	-.1519			-.0909	
150.000				.1249	-.3227	-.3832	-.3295	-.1807	.0026	.1107	-.0968	-.2548	-.1737	-.1295	-.0549
165.000					-.3275	-.3832	-.3139	-.1694	.0535	.1737	.0478	-.2318	-.1184	-.0835	-.0025
180.000				.9914	.5418	.1043	-.3397	-.3803	-.3093	-.1525	-.0219	.1763	.1307	-.4403	-.1117
270.000				.7016					.0624	.1763	.1307	-.4403	-.1117	-.0877	.0146

X/LT .7480 .8530 .9280

PHI

.0000	.0067	-.0349	-.3509
30.000	.0022	-.0197	-.3459
60.000	.0030	-.0032	-.2133
90.000	.0321	.0133	
120.000	.0780	.0414	.0409
135.000	.0786	.0770	.0100
150.000	.0267	.0414	-.0841
165.000	.0810	.0766	.0805
180.000	.0880	.0794	-.1568

ALPHAT ( 5 ) = 8.030 BETAT ( 4 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9736	.9344	.5355	.0311	-.2281	-.2332	-.1490	-.0240	.0119	-.0222	-.0195	-.0106	-.0205	-.0035
30.000				.4156	-.0789	-.3004	-.2863	-.1649	-.0248	.0306	-.0509	-.0347	-.0403	-.0435	-.0266
60.000				.2790	-.2027	-.3377	-.2759	-.1169	.0775	.1834	-.1338	-.0664	-.0080	-.0179	-.0127
90.000				.5825	.1561	-.2929	-.3366	-.2522	.0903	.1455	.2324	-.2266	.0062	-.0438	-.0311
120.000				.0878	-.3511	-.3455	-.2774	-.1192	-.0080	-.0216	-.2080	-.4279	-.1504	-.0912	-.0806
135.000								-.0137		-.0188	-.1732			-.0767	
150.000				.0776	-.3574	-.3620	-.3012	-.1545	.0381	.1036	-.2312	-.3387	-.2545	-.1784	-.0837
165.000					-.3519	-.3766	-.3157	-.1653	.0533	.1593	-.0140	-.2748	-.1298	-.0812	-.0190
180.000				.9736	.5467	.0886	-.3527	-.3830	-.3319	-.1671	-.0454	.1525	.1216	-.3637	-.1068
270.000				.8132					.0415	.1525	.1216	-.3637	-.1254	-.1068	-.0279

X/LT .7480 .8530 .9280

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+712+512N25+AT11 EXTERNAL TANK (RB1735)

ALPHAT ( 5 ) = 8.030 BETAT ( 4 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7460 .8530 .9280

RHI  
.000 -.0140 -.0508 -.3692  
30.000 -.0235 -.0453 -.3711  
60.000 -.0124 -.0128 -.2207  
90.000 .0108 .0082  
120.000 .0499 .0160 -.0075  
135.000 .0493 .0385 -.0905  
150.000 .0024 -.0209 -.2154  
165.000 .0511 .0383 .0291  
180.000 .0550 .0333 -.2090

ALPHAT ( 5 ) = 8.020 BETAT ( 5 ) = 8.270

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
RHI  
.000 .9057 .8725 .4966 .0172 -.2561 -.2563 -.1807 -.0722 -.0275 -.0642 -.0368 -.0907 -.0578 -.0315 -.0511  
30.000 .3045 -.1612 -.3727 -.3366 -.2265 -.0922 -.0067 -.0777 -.0905 -.0850 -.0745 -.0781  
60.000 .1392 -.3074 -.3965 -.3280 -.1473 .0501 .1897 -.1164 -.0764 -.0314 -.0207 -.0281 -.0285  
90.000 .4527 .0436 -.3740 -.3488 -.2405 -.0324 .1565 .2681 .2431 .0083 -.0322 -.0346 -.0311  
120.000 .0105 -.3908 -.3410 -.2441 -.0830 .0441 .0267 -.2012 -.3699 -.1648 -.1102 -.0956 -.0433  
135.000 .0172 -.3929 -.3664 -.2761 -.1296 .0063 .0277 -.0289 -.0785 -.2732 -.4236 -.2745 -.2003 -.1102  
150.000 .3929 -.3997 -.3208 -.1705 -.0364 .0413 .1303 .0581 -.2484 -.1740 -.1675 -.0785  
165.000 .9057 .4482 .0648 -.3737 -.4126 -.3478 -.1973 -.0691 .0534 -.2788 -.2176 -.2005 -.0838  
180.000 .9015

W/LT .7460 .8530 .9280

RHI  
.000 -.0122 -.0970 -.4065  
30.000 -.0626 -.0859 -.3893  
60.000 -.0177 -.0241 -.2038  
90.000 .0023 .0058  
120.000 .0228 .0045 -.0028  
135.000 .0151 .0210 -.0905  
150.000 -.0480 -.0627 -.2043  
165.000 .0074 .0105 .0588  
180.000 -.0201 -.0189 -.2175

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ARC11-716 IAI14 01+12+512N25+711 EXTERNAL TANK (R81736) ( 14 FEB 74 )

## REFERENCE DATA

SRFP = 2.4210 50. FT. XMRP = 29.9800 INCHES  
 LREF = 30.7090 INCHES YMRP = .0000 INCHES  
 BRFP = 30.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHAT ( 1 ) = -0.570 BETAT ( 1 ) = -0.100

## PARAMETRIC DATA

MACH = .890 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380	
PMI	.0000	.9408	.5136	.0925	-.3950	-.5875	-.3785	-.2234	-.1124	-.1042	-.1741	-.2341	-.1696	-.1018	-.0833	-.0492
30.000	.1905	-.3069	-.5392	-.5062	-.2932	-.2056	-.2418	-.3227	-.3837	-.2937	-.1174	-.0340	-.0810			
60.000	.3572	-.1414	-.3808	-.3386	-.2281	-.1462	-.2632	-.5499	-.6937	-.2636	-.0421	-.0085	-.0110			
90.000	.5418	.0453	-.2041	-.1571	.0251	.1485	.2316	-.6930	-.6029	-.1883	-.0781	-.0548				
120.000	.6585	.1715	-.1086	-.0866	.0418	.2250	.3191	.0432	.0747	.0088	-.0261	-.0084	.0386			
135.000	.6930	.1919	-.1051	-.1021	.0019	.1500	.2303	.2049	.2049	-.0369	-.0291					
150.000	.1466	-.1467	-.1490	-.0368	.0988	.2010	.3330	.2031	.2488	-.1860	-.1587	-.0334				
165.000	.9408	1.0000	.5776	.0790	-.1542	-.1579	-.0662	.1751	.0002	.1452	-.5770	-.2354	-.2100	-.0774		
270.000	.5164							.2621								

X/LT .7480 .8530 .9280

PMI

.0000 -0.0694 -1.1113 -3.3833  
 30.000 -0.0942 -1.1065 -3.1900  
 60.000 -0.0905 -0.9815 -1.326  
 90.000 -1.1385 -3.110  
 120.000 .0806 -1.1239 .2188  
 135.000 .0880 .0176 .2129  
 150.000 .0240 .0278 .0362  
 165.000 .0391 .0354 .2675  
 180.000 .0024 .0031 -0.155

ALPHAT ( 1 ) = -0.540 BETAT ( 2 ) = -4.040

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PMI	.0000	.9932	.5611	.1286	-.3776	-.4727	-.3557	-.1843	-.0730	-.0670	-.1514	-.2345	-.1575	-.0680	-.0398
30.000	.1766	-.3217	-.5062	-.4047	-.2293	-.1264	-.1549	-.2602	-.3827	-.1926	-.0893	-.0602	-.0496		
60.000	.2835	-.2191	-.4165	-.3339	-.1906	-.1008	-.2066	-.4845	-.6737	-.3416	-.0613	-.0179	-.0116		
90.000	.4322	-.0718	-.2872	-.2138	-.0005	.1744	.2313	-.6435	-.6708	-.2049	-.0784	-.0375			
120.000	.5655	.0623	-.1993	-.1564	.0131	.1945	.3138	.0281	.0129	-.0829	-.1021	-.0468	.0090		
135.000	.6340	.1269	-.1584	-.1432	-.0230	.1565	.1782	-.1227	-.0675						
150.000						.1367	.2312	.3134	.0363	-.2350	-.2494	-.1575	-.0641		



DATE 08 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC:1-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1736)

ALPHAT (1) = -8.340 BETAT (2) = -4.040

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
THI															
165.000				.1292	-.1647	-.1530	-.0315	.1108	.2147	.3352	.1634	-.4753	-.2239	-.1409	-.0227
180.000	.9932	1.0250	.6056	.0973	-.1873	-.1732	-.0369	.1000	.2003	.3224	.1670	-.6479	-.2062	-.1440	-.0335
270.000		.6304													.2366

X/LT .7460 .9530 .9280

THI

.000	-.0437	-.0907	-.3783
30.000	-.0514	-.0735	-.3458
60.000	-.0328	-.0514	-.1898
90.000	-.0532	-.1404	
120.000	.0515	-.1758	.1614
135.000	.0501	-.0352	.1301
150.000	-.0036	-.0269	-.0238
165.000	.0323	.0021	.2025
180.000	.0167	-.0150	-.0467

ALPHAT (1) = -8.480 BETAT (3) = -.020

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
THI															
.000	1.0180	.5787	.1357	-.3672	-.4445	-.3515	-.1772	-.0585	-.0573	-.1396	-.2355	-.1576	-.0516	-.0135	-.0102
30.000			.1513	-.3464	-.4674	-.3530	-.1810	-.0685	-.0854	-.2094	-.3374	-.2098	-.0608	-.0397	-.0338
60.000			.2147	-.2897	-.4233	-.3162	-.1428	-.0505	-.1442	-.4309	-.6379	-.3628	-.0663	-.0158	-.0110
90.000	.7458		.3177	-.1816	-.3557	-.2359	-.0709	.1744	.2386		-.6065	-.7430	-.2036	-.0563	-.0235
120.000			.4424	-.0463	-.2773	-.2214	-.0258	.1631	.3127	.0270	-.0472	-.1711	-.1484	-.0656	-.0095
135.000								.1259	.1557	.1557		-.2238		-.1000	
150.000			.5594	.0468	-.2267	-.1075	-.0600	.1127	.2265	.2866	-.0976	-.4703	-.3381	-.2043	-.1038
165.000			.0363	.0363	-.1978	-.1522	-.0732	.1066	.2168	.3263	.0928	-.5433	-.2513	-.1510	-.0427
180.000	1.0180	1.0220	.6144	.0998	-.1643	-.1538	-.0312	.1089	.2127	.3174	.1781	-.6513	-.2235	-.1414	-.0341
270.000		.7427													.2296

X/LT .7460 .8530 .9280

THI

.000	-.0346	-.0853	-.3817
30.000	-.0385	-.0752	-.3624
60.000	-.0251	-.0472	-.2294
90.000	-.0282	-.0789	
120.000	.0293	-.1591	.0351
135.000	.0160	-.0598	-.0371
150.000	-.0351	-.0456	-.1030

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ARC11-715 IA14 01-712-S12-25-AT11 EXTERNAL TANK (RB1736)

ALPHAT(1) = -8.480 BETAT(3) = -.020

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI

165.000 .0069 -.0439 .0595  
 180.000 .0100 -.0345 -.1497

ALPHAT(1) = -8.490 BETAT(4) = 4.090

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

.000 .9955 .5618 .1237 -.3740 -.5063 -.3652 -.1935 -.0753 -.1533 -.2387 -.1614 -.0647 -.0372 -.0372  
 30.000 .1119 -.3886 -.4185 -.3170 -.1478 -.0351 -.0398 -.0734 -.1668 -.2962 -.2017 -.0427 -.0211 -.0333  
 60.000 .1316 -.3662 -.4281 -.2318 -.1016 .0028 -.0845 -.3401 -.5981 -.3574 -.0495 -.0133 -.0170  
 90.000 .2024 -.2882 -.3751 -.2339 -.0100 .1786 .2571 -.5975 -.7143 -.1740 -.0304 -.0170  
 120.000 .3247 -.1685 -.3825 -.2582 -.0609 .1441 .3102 .0229 -.1017 -.2240 -.1665 -.0978 -.0376  
 150.000 .4541 -.0457 -.3032 -.2588 -.1065 .0602 .1178 -.2924 -.2546 -.5344 -.3577 -.2163 -.1163  
 165.000 .0408 -.2425 -.2175 -.0751 .0723 .1864 .2860 .0429 .6581 -.2162 -.1472 -.0697  
 180.000 .9955 1.0180 .6021 .0898 -.1993 -.1772 -.0337 .0953 .2958 .1682 -.6607 -.2214 -.1863 -.0619  
 270.000 .8439 .2201

X/LT .7460 .8530 .9280

PMI

.000 -.0441 -.0962 -.3778  
 30.000 -.0420 -.0629 -.3711  
 60.000 -.0335 -.0570 -.2496  
 90.000 -.0206 -.0705  
 120.000 -.0161 -.1197 -.0468  
 150.000 -.0234 -.0852 -.1491  
 180.000 -.1092 -.1626 -.2649  
 165.000 -.0242 -.0559 .0194  
 180.000 -.0217 -.0489 -.2016



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

(R81736)

ARL11-716 IAI4 OA-T12-S12N23-AT11 EXTERNAL TANK

ALPHAT ( 1 ) = -0.320 BETAT ( 5 ) = 0.160

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/L/T	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	.9368	.5012	.0696	-.3992	-.5862	-.3794	-.2246	-.1149	-.1063	-.1761	-.2340	-.1701	-.1087	-.0864	-.0637
30.000			.0506	-.4381	-.3753	-.2932	-.1221	-.0104	-.0133	-.1414	-.2646	-.1986	-.0546	-.0357	-.0476
60.000			.0557	-.4309	-.3353	-.2231	-.0590	.0376	-.0315	-.2873	-.5760	-.3680	-.0398	-.0163	-.0311
90.000		.5173	.0351	-.3796	-.3540	-.2152	.0063	.1801	.2739	-.5874	-.6468	-.1594	-.0391	-.0303	
120.000			.2072	-.2744	-.4181	-.2932	-.0842	.1217	.2958	-.0214	-.1436	-.2571	-.2090	-.1538	-.0977
150.000								.0485		.0845		-.3450		-.2273	
180.000			.3503	-.1408	-.3821	-.3235	-.1570	.0152	.1542	.1442	-.3394	-.6224	-.4181	-.2663	-.1743
210.000				-.0116	-.2329	-.2646	-.1274	.0139	.1417	.2096	-.0199	-.6549	-.2621	-.2364	-.1369
240.000	.9368	.9180	.5725	.0701	-.2205	-.2036	-.0683	.0465	.1809	.2516	.1392	-.4817	-.3022	-.2715	-.1457
270.000		.9284						.2191							
K/L/T	.7460	.6530	.9280												

PMI															
.000	-.0698	-.1084	-.3761												
30.000	-.0639	-.0960	-.3007												
60.000	-.0435	-.0736	-.2561												
90.000	-.0394	-.1045													
120.000	-.0655	-.1721	-.0736												
150.000	-.0662	-.1090	-.1768												
180.000	-.1527	-.2133	-.2842												
210.000	-.0783	-.1055	-.0319												
240.000	-.1009	-.1145	-.2155												

ALPHAT ( 2 ) = -4.300 BETAT ( 1 ) = -0.160

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/L/T	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.0030	.6325	.2132	-.2898	-.5241	-.4051	-.2245	-.1083	-.1005	-.1763	-.2074	-.1311	-.0899	-.0816	-.0792
30.000			.3257	-.1814	-.4440	-.4053	-.2389	-.1332	-.1640	-.2677	-.3031	-.1446	-.1062	-.0885	-.0735
60.000			.4641	-.0494	-.3019	-.2738	-.1209	-.0185	-.0902	-.5643	-.5752	-.1943	-.0066	-.0020	-.0122
90.000		.9873	.5783	.0672	-.1808	-.1320	.0559	.2341	.3368	-.5646	-.5071	-.5071	-.1170	-.0609	-.0436
120.000			.6216	.1174	-.1543	-.1262	.0238	.1778	.2342	-.1009	.0050	.0107	-.0292	-.0168	.0323
150.000								.1219		.1213		.0415		-.0387	
180.000			.5893	.0797	-.2025	-.1861	-.0777	.0855	.1507	.2854	.1920	-.2028	-.2129	-.1437	-.0374
210.000				.0208	-.2574	-.2412	-.1006	.0401	.1346	.2844	.1759	-.2538	-.1847	-.1445	-.0229
240.000	1.0030	.9124	.4592	-.0445	-.2961	-.2683	-.1098	.0265	.1312	.2660	.1265	-.6050	-.2271	-.1875	-.0601
270.000		.5814						.3920							
K/L/T	.7460	.6530	.9280												

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ARC11-716 1A14 01+T12+S12N25+AT11 EXTERNAL TANK

R0817360

ALPHAT ( 2 ) = -4.300 BETAT ( 1 ) = -0.160

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .0530 .9280

PMI

.0000 -.0735 -.1047 -.3403  
 30.0000 -.0714 -.0671 -.3471  
 60.0000 -.0141 -.2 -.1641  
 90.0000 -.0572 -.1495  
 120.0000 .0998 -.0301 .2450  
 150.0000 .1110 .0825 .2430  
 180.0000 .0588 .0825 .1080  
 210.0000 .0733 .0890 .2832  
 240.0000 .0427 .0525 .0916

ALPHAT ( 2 ) = -4.290 BETAT ( 2 ) = -4.060

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .6360

PMI

.0000 1.0630 .6865 .2492 .2706 -.9039 -.3767 -.1924 -.0640 -.0591 -.1579 -.1854 -.1157 -.0544 -.0375 -.0341  
 30.0000 .3039 .2135 -.4516 -.3731 -.1919 -.0706 -.0908 -.2325 -.2748 -.1513 -.0694 -.0614 -.0447  
 60.0000 .3668 .1321 .3328 -.2915 -.1006 .0139 -.0478 -.4842 -.5560 .2341 .0269 .0051 .0109  
 90.0000 .9022 .4666 .0444 .2634 -.1785 .0315 .2302 .3422 -.5573 .6106 .1044 .0431 .0205  
 120.0000 .5212 .0105 .2361 -.1868 .0011 .1667 .2457 .1210 .0922 .0831 .0907 .0652 .0015  
 150.0000 .5411 .0266 .2373 .2084 .0680 .0923 .1700 .2665 .0321 .2425 .2415 .1829 .0634  
 180.0000 .3027 .2803 .2286 .0801 .0675 .1574 .2901 .1476 .4541 .2135 .1465 .0222  
 210.0000 1.0630 .9353 .4916 .0320 .2785 .1108 .0771 .0649 .1546 .2783 .1543 .6679 .1938 .1403 .0433  
 240.0000 .6946 .3677

X/LT .7400 .0530 .9280

PMI

.0000 -.0415 -.0741 -.3575  
 30.0000 -.0369 -.0556 -.3392  
 60.0000 .0092 .0109 .1859  
 90.0000 .0118 .0595  
 120.0000 .0656 .0769 .1830  
 150.0000 .0692 .0435 .1730  
 180.0000 .0231 .0371 .0397  
 210.0000 .0534 .0622 .2073  
 240.0000 .0407 .0366 .0319



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAL14A - VOL. 9

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ARC11-715 IAL14 31+712+512+5+AT11 EXTERNAL TANK

(RB1736)

ALMAT(2) = -4.270 BETAT(3) = .030

SECTION 11 EXTERNAL TANK DEPENDENT VARIABLE C3

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.5980
THI															
.000	1.0610	.7015	.2517	-.2613	-.4851	-.3556	-.1790	-.0550	-.0448	-.1343	-.1874	-.1225	-.0517	-.0249	-.0169
30.000	.2604	-.2528	-.4473	-.3412	-.1631	-.0395	-.0395	-.0395	-.0425	-.1084	-.2520	-.1612	-.0410	-.0332	-.0370
60.000	.2994	-.2187	-.3716	-.3026	-.0903	.0399	.0399	.0399	-.0021	-.3997	-.5516	-.3090	-.0213	-.0128	-.0164
90.000	.0062	.3564	-.1576	-.3199	-.2119	.0253	.2289	.3585	.3585	-.5475	-.5535	-.0837	-.0197	-.0107	-.0107
120.000	.4190	-.0940	-.2991	-.2197	-.0241	.1605	.2558	.1100	.1100	-.1167	-.1070	-.1414	-.0788	-.0153	-.0153
150.000	.4750	-.0473	-.2890	-.2351	-.0774	.0893	.1797	.2305	.2305	-.1138	-.4582	-.3036	-.2001	-.1010	-.1010
180.000	.9382	-.0210	-.2852	-.2439	-.0771	.0697	.1682	.2835	.2835	.0776	-.5601	-.2425	-.1536	-.0438	-.0438
210.000	.8052	-.0207	-.2824	-.2412	-.0655	.0734	.1687	.2734	.2734	.1594	-.6965	-.2169	-.1433	-.0312	-.0312
W/LT	.7460	.6330	.9280												

THI

.000	-.0212	-.0812	-.3483												
30.000	-.0274	-.0509	-.3306												
60.000	-.0119	-.0233	-.2023												
90.000	.0317	-.0285													
120.000	.0339	-.1014	.0750												
150.000	.0283	-.0123	-.0003												
180.000	-.0264	-.0439	-.1322												
210.000	-.0250	.0007	.0316												
240.000	.1293	.0086	-.1548												

ALMAT(2) = -4.280 BETAT(4) = 4.080

SECTION 11 EXTERNAL TANK DEPENDENT VARIABLE C3

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.5980
THI															
.000	1.0600	.6793	.2357	-.2745	-.4639	-.3743	-.1997	-.0762	-.0640	-.1558	-.1885	-.1231	-.0619	-.0405	-.0393
30.000	.2072	-.3021	-.4455	-.3256	-.1479	-.0219	-.0219	-.0219	-.0157	-.1974	-.2251	-.1166	-.0574	-.0483	-.0401
60.000	.2031	-.3003	-.3904	-.2540	-.0770	.0569	.0569	.0569	.0428	-.4434	-.5590	-.2165	-.0452	-.0296	-.0219
90.000	.6694	.2711	-.2570	-.3499	-.2126	.0214	.2319	.3728	.3728	-.5407	-.5407	-.1205	-.0192	-.0683	-.0650
120.000	.3052	-.1599	-.3519	-.2459	-.0364	.1534	.2627	.1126	.1126	-.1126	-.1126	-.1539	-.1349	-.0855	-.0302
150.000	.3889	-.1260	-.3446	-.2710	-.1052	.0582	.1637	.2680	.2680	-.0680	-.2337	-.1324	-.1324	-.1324	-.1324
180.000	.9319	-.0634	-.3161	-.2657	-.1060	.0420	.1514	.2568	.2568	.0324	-.6027	-.2005	-.1389	-.0636	-.0636
210.000	.9047	-.0311	-.2924	-.2497	-.0866	.0512	.1574	.2578	.2578	.1483	-.6495	-.2031	-.1832	-.0615	-.0615
240.000	.9280														

W/LT

.7460 .6330 .9280

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI44 - VOL. 9

ARC11-716 IAI4 CR-T12-S12M3-WAT111 EXTERNAL TANK (081736)

ALPHAT(2) = -4.280 BETAT(4) = 4.000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .0530 .9200

MMI  
 .000 -.0395 -.0758 -.3807  
 30.000 -.0325 -.0624 -.3496  
 60.000 -.0126 -.0300 -.1921  
 90.000 -.0204 -.0403  
 120.000 .0013 -.0966 -.0274  
 135.000 .0010 -.0364 -.1075  
 150.000 -.0652 -.1577 -.2317  
 165.000 .0067 -.0108 .0347  
 180.000 .0106 -.0215 -.1841

ALPHAT(2) = -4.280 BETAT(9) = 3.150

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0300 .0530 .0400 .1130 .1730 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6300

MMI  
 .030 1.0010 .6222 .2026 -.2982 -.5315 -.4265 -.2340 -.1163 -.1035 -.1747 -.2035 -.1376 -.0895 -.0615 -.0830  
 30.000 .1354 -.3622 -.4846 -.2846 -.1453 -.0166 .0017 -.1716 -.2164 -.1171 -.0647 -.0364 -.0610  
 60.000 .1160 -.3061 -.3549 -.2317 -.0492 .0962 .0745 .3897 .3939 .2035 .0370 .0323 .0398  
 90.000 .5795 .1343 .3562 .3300 .1868 .0447 .2304 .3963 .5299 .1009 .0241 .1065 .1104  
 120.000 .1906 -.2956 -.3630 .2343 .0445 .1465 .2578 .1140 .1778 .1728 .1376 .1411 .0910  
 135.000 .2906 -.2139 .3997 .3190 .1364 .0359 .1502 .1415 .3462 .5555 .3760 .2409 .1427  
 150.000 .1222 .3802 .3068 .1410 .0021 .1190 .1912 .0392 .5801 .2356 .2269 .1194  
 165.000 .4572 .0533 .3115 .2760 .1124 .0076 .1195 .2132 .1191 .4792 .2889 .2616 .1272  
 180.000 .6400 .9922  
 270.000 .3267

K/LT .7400 .0530 .9200

MMI  
 .000 -.0755 -.1504 -.3780  
 30.000 -.0543 -.0755 -.3522  
 60.000 -.0360 -.0400 -.1814  
 90.000 -.1011 -.1099  
 120.000 .0445 .1104 .0363  
 135.000 .0565 .0470 .1332  
 150.000 .1146 .1411 .2402  
 165.000 .0444 .0401 .0168  
 180.000 .0635 .1064 .1835



DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4771

ARC11-715 IAI4 06-712-5:2MS-A-11: EXTERNAL TANK (N81730)

ALPHAT(3) = -.550 BETAT(1) = -9.180

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

M/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5560	.6360
Wt															
.000	1.0280	.7532	.3144	-.2020	-.4713	-.4377	-.2260	-.0998	-.0828	-.1800	-.1806	-.1336	-.0928	-.0833	-.0773
30.000			.4330	-.0822	-.3587	-.3529	-.2302	-.0774	-.0909	-.2356	-.2241	-.1258	-.0925	-.0757	-.0528
60.000			.5413	.0250	-.2594	-.2177	-.0712	.0615	.0311	-.5951	-.5207	-.0762	.0221	.0016	.0003
90.000		1.0060	.5941	.0794	-.1815	-.1261	.0722	.2310	.3748		-.6152	.0476	.0278	-.0301	-.0102
120.000			.5654	.0564	-.2080	-.1743	-.0174	.1219	.1121	-.1807	-.0952	.0807	.0021	-.0138	.0303
150.000								.0588		.0603		-.0139		-.0337	
180.000			.4919	-.0225	-.2824	-.2165	-.1235	.0315	.0701	.2375	.1578	-.1941	-.1950	-.1294	-.0268
210.000				-.0937	-.3451	-.3062	-.1480	.0034	.0847	.2495	.1649	-.2134	-.1626	-.1333	-.0059
240.000	1.0280	.6232	.3577	-.1493	-.3703	-.3123	-.1333	.0090	.0990	.2420	.1181	-.5162	-.2064	-.1823	-.0433
270.000		.5926							.4403						

M/LT .7480 .6330 .9280

Wt

.000	-.0708	-.0987	-.3482												
30.000	-.0417	-.0590	-.3190												
60.000	.0087	.0039	-.1671												
90.000	.0295	-.0274													
120.000	.1155	.0518	.2327												
150.000	.1253	.1315	.2419												
180.000	.0803	.1182	.1249												
210.000	.0998	.1252	.2985												
240.000	.0585	.0868	.0133												

ALPHAT(3) = -.550 BETAT(2) = -4.080

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

M/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5560	.6360
Wt															
.000	1.0850	.7873	.3468	-.11720	-.4132	-.3695	-.1883	-.0603	-.0420	-.1410	-.1415	-.0991	-.0568	-.0438	-.0348
30.000			.4914	-.1217	-.3839	-.3321	-.1690	-.0399	-.0414	-.2245	-.1981	-.0998	-.0584	-.0472	-.0327
60.000			.4520	-.0685	-.3090	-.2400	-.0748	.0765	.0801	-.6256	-.5229	-.1142	.0081	.0038	.0071
90.000		.8195	.4934	-.0376	-.2624	-.1863	.0332	.2442	.3856		-.6453	.0770	.0107	-.0638	-.0473
120.000			.4752	-.0409	-.2721	-.2036	-.0275	.1278	.1635	-.2745	-.1069	.0110	-.0335	-.0381	-.0093
150.000								.0884		.0382		-.0907		-.0739	
180.000			.4506	-.0719	-.3077	-.2588	-.1024	.0560	.1103	.2163	.0567	-.1877	-.2091	-.1800	-.0439
210.000				-.1031	-.3358	-.2872	-.1161	.0315	.1256	.2603	.1413	-.3497	-.1805	-.1494	-.0048
240.000	1.0850	.6485	.3858	-.1312	-.3530	-.2840	-.1050	.0426	.1268	.2495	.1456	-.6865	-.1730	-.1488	-.0338
270.000		.7139							.4141						

M/LT .7480 .6330 .9280

Wt

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08017360

ARC11-716 IASNA 01071205120507111 EXTERNAL TANK

ALPHAT ( 3 ) = -.520 BETAT ( 2 ) = -4.060

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C<sub>0</sub>

W/LT .7460 .6330 .9280

PMI  
 .0000 -.0208 -.0379 -.3099  
 30.0000 -.0170 -.0369 -.2914  
 60.0000 .0099 .0079 -.1749  
 90.0000 .0251 .0486  
 120.0000 .0755 .0102 .1336  
 135.0000 .0637 .0690 .1532  
 150.0000 .0524 .0713 .0323  
 165.0000 .0681 .0956 .2167  
 180.0000 .0669 .0747 -.0200

ALPHAT ( 3 ) = -.540 BETAT ( 3 ) = .020

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C<sub>F</sub>

W/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI  
 .0000 1.1010 .8032 .3560 -.1698 -.4035 -.3563 -.1756 -.0411 -.0317 -.1336 -.1349 -.0639 -.0447 -.0274 -.0142  
 30.0000 .3563 -.1670 -.3961 -.3355 -.1907 -.0153 -.0269 -.1949 -.1779 -.0935 -.0378 -.0228  
 60.0000 .3566 -.1629 -.3445 -.2506 -.0700 .0480 .0913 -.5949 -.5144 -.1324 -.0147 -.0121 -.0045  
 90.0000 .8240 .3692 -.1482 -.3110 -.2130 .0422 .2499 .3983 .6432 .0976 .0352 .1092 .0748  
 120.0000 .3753 .1339 -.3125 .2332 .0264 .1349 .1931 .2992 .1269 .0457 .0935 .0839 .0240  
 135.0000 .3915 .1244 .3300 .2640 .0960 .0635 .1352 .1910 .1207 .3493 .2594 .1874 .0400  
 165.0000 .1198 .3404 .2777 .1030 .0439 .1357 .2491 .0820 .4152 .1884 .1439 .0294  
 180.0000 1.1010 .8442 .3902 .1221 .3435 .2744 .0662 .0390 .1398 .2453 .1592 .1084 .1266 .0211  
 270.0000 .8263

W/LT .7460 .6330 .9280

PMI  
 .0000 -.0191 -.0432 -.3101  
 30.0000 -.0136 -.0256 -.2912  
 60.0000 .0032 .0084 -.1613  
 90.0000 .0065 .0300  
 120.0000 .0480 .0277 .0569  
 135.0000 .0511 .0346 .0240  
 150.0000 .0036 .0066 .0619  
 165.0000 .0510 .0369 .0394  
 180.0000 .0603 .0427 .1456

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4773

ARC11-716 1A14 01+T12+S12N23+AT11: EXTERNAL TANK (RB113U)

A\_PNAT ( 3 ) = -.530 BETAT ( 4 ) = 0.180

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0210	.7232	.3086	-.2048	-.4657	-.4055	-.2357	-.1100	-.0865	-.1728	-.1885	-.1393	-.1004	-.0880	-.0786	
30.000			.2088	-.2969	-.47.7	-.3956	-.1586	-.0187	.0113	-.1671	-.1919	-.1126	-.0766	-.0745	-.0539	
60.000			.1632	-.3377	-.3881	-.2413	-.0378	.1280	.1307	-.5028	-.4170	-.1619	-.0735	-.0535	-.0368	
90.000			.5928	.1447	-.3454	-.3111	-.1854	.0575	.2665	.4410	-.5700	.0257	-.1420	-.1869	-.1359	
120.000				.1669	-.3223	-.3530	-.2289	-.0177	.1478	.2154	-.2373	-.1727	-.1393	-.1755	-.1459	-.0924
135.000								.0844		.0118		-.2262		-.1738		
150.000				.2281	-.2720	-.3901	-.2889	-.1129	.1426	.1255	-.3486	-.4813	-.3703	-.2413	-.1443	
165.000					-.2105	-.3975	-.3149	-.1466	.1904	.1758	-.0342	-.4.58	-.2194	-.2239	-.1112	
180.000	1.0210	.7160	.3514	-.1577	-.3800	-.3154	-.1371	-.0183	.0817	.1825	.1104	-.4458	-.2719	-.2584	-.1244	
270.000		1.0130								.3695						
X/LT	.7460	.6330	.9280													

ALPHAT ( 4 ) = 3.740 BETAT ( 1 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0710	.8940	.4720	-.0560	-.3597	-.3352	-.1701	-.0347	-.0055	-.0883	-.0929	-.0598	-.0429	-.0265	-.0218	
30.000			.5181	-.0119	-.3124	-.2915	-.1297	.0102	.0228	-.1379	-.1043	-.0362	-.0284	-.0219	-.0099	
60.000			.5204	-.0047	-.2669	-.2128	-.0419	.1275	.1596	-.5261	-.2534	-.0689	-.0083	-.0060	.0037	
90.000			.9060	.4757	-.0392	-.2638	-.1861	.0318	.2282	.3651	-.6763	-.1242	-.0743	-.0788	-.0345	
120.000				.3962	-.1116	-.3198	-.2429	-.0824	.0549	.0534	-.1763	-.3994	-.0510	-.0200	-.0436	.0097
135.000									.0125		.0253		-.1492		-.0588	
150.000				.3325	-.1825	-.3778	-.3167	-.1335	.0017	.0412	.1876	.0489	-.2728	-.1901	-.1388	-.0295
165.000					-.2214	-.3973	-.3231	-.1397	.0017	.0769	.2244	.1171	-.3448	-.1794	-.1189	.0048
180.000	1.0710	.7240	.2596	-.2532	-.4067	-.3022	-.1118	.0236	.0590	.2198	.1336	-.7233	-.1545	-.1269	-.0158	
270.000		.7051							.4002							
X/LT	.7460	.6330	.9280													

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ARC11-716 IA14 OL+T12+S12N23+AT11 EXTERNAL TANK

(RB1730)

ALPHAT ( 4 ) = 3.740 BETAT ( 1 ) = -4.090

## SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .6530 .9280

PHI

.000 -.0135 -.0386 -.2771  
 30.000 -.0014 -.0102 -.2585  
 60.000 .0235 .0389 -.1386  
 90.000 .0408 .0450  
 120.000 .1117 .0830 .1678  
 135.000 .1202 .1400 .1686  
 150.000 .0871 .1079 .0706  
 165.000 .1110 .1342 .2293  
 180.000 .0938 .1058 -.0143

ALPHAT ( 4 ) = 3.740 BETAT ( 2 ) = .010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.0890 .9155 .4776 -.0497 -.3429 -.3242 -.1596 -.0220 .0070 -.0856 -.0801 -.0471 -.0223 -.0146 -.0075  
 30.000 .4595 -.0729 -.3516 -.3105 -.1358 .0119 .0414 -.1401 -.1010 -.0497 -.0275 -.0200 -.0168  
 60.000 .4199 -.1117 -.3422 -.2542 -.0564 .1250 .1758 -.4824 -.2265 -.0541 -.0319 -.0293 -.0143  
 90.000 .8055 .3612 -.1535 -.3303 -.2121 .0253 .2312 .3799 -.7316 -.1247 -.0915 -.0909 -.0375  
 120.000 .3104 -.2036 -.3571 -.2550 -.0585 .0840 .0947 -.2413 -.3657 -.1046 -.0713 -.0705 -.0014  
 135.000 .0499  
 150.000 .2847 -.2273 -.3855 -.2945 -.1171 .0329 .0761 .1693 -.1305 -.3165 -.2130 -.1657 -.0630  
 165.000 -.2339 -.3901 -.3036 -.1243 .0188 .1020 .2249 .0689 -.4189 -.1531 -.1229 -.0117  
 180.000 1.0890 .7246 .2681 -.2425 -.3985 -.2948 -.1107 .1043 .2177 .1478 -.7419 -.1407 -.1097 -.0014  
 270.000 .8101 .3811

X/LT .7480 .6530 .9280

PHI

.000 -.0019 -.0220 -.2639  
 30.000 -.0037 -.0107 -.2657  
 60.000 .0280 .0180 -.1904  
 90.000 .0278 .0328  
 120.000 .0806 .0265 .0942  
 135.000 .0798 .0781 .0323  
 150.000 .0390 .0561 .0266  
 165.000 .0822 .0814 .0495  
 180.000 .0868 .0822 -.1427



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+T12+S12M25+AT11 EXTERNAL TANK

(R81T36)

ALPHAT ( 4 ) = 3.730 BETAT ( 3 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	.8838	.4533	-.0686	-.3634	-.3473	-.2160	-.0345	-.0099	-.0920	-.1029	-.0650	-.0448	-.0380	-.0245
30.000			.3775	-.1448	-.4090	-.3529	-.1350	.0035	.0443	-.1313	-.1220	-.0645	-.0449	-.0379	-.0266
60.000			.3005	-.2183	-.3936	-.2808	-.0576	.1327	.1938	-.4385	-.2097	-.0622	-.0509	-.0408	-.0232
90.000		.6985	.2470	-.2806	-.3905	-.2117	.0340	.2383	.4060	-.7533	-.7533	-.1093	-.0995	-.0874	-.0413
120.000			.2218	-.2857	-.3581	-.2390	-.0376	.1160	.1390	-.2509	-.3403	-.1494	-.1186	-.0881	-.0194
135.000								.0728		.0026		-.1965		-.1093	
150.000			.2317	-.2793	-.3829	-.2788	-.1005	.0492	.1135	.1418	-.2112	-.4072	-.3114	-.2106	-.0722
165.000				-.2631	-.4007	-.3036	-.1218	.0170	.1050	.2084	.0039	-.4823	-.1888	-.1186	-.0390
180.000	1.0710	.7349	.2541	-.2486	-.4123	-.3139	-.1257	.0070	.0876	.2064	.1420	-.6907	-.1612	-.1536	-.0363
270.000		.9162							.3689						

X/LT .7460 .8330 .9280

PHI

.000	-.0151	-.0363	-.2725
30.000	-.0154	-.0221	-.2779
60.000	-.0086	-.0011	-.1581
90.000	.0180	.0181	
120.000	.0525	.0099	.0233
135.000	.0538	.0462	-.0800
150.000	.0025	-.0221	-.1883
165.000	.0569	.0557	-.0766
180.000	.0587	.0595	-.1429

ALPHAT ( 4 ) = 3.730 BETAT ( 4 ) = 8.220

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.8303	.4234	-.0337	-.3386	-.3824	-.2259	-.0885	-.0593	-.1248	-.1311	-.1050	-.0781	-.0805	-.0710
30.000			.2853	-.2296	-.4790	-.4252	-.1717	-.0387	.0231	-.1219	-.1342	-.0864	-.0743	-.0725	-.0374
60.000			.1843	-.3193	-.4296	-.2748	-.0626	.1329	.2121	-.3930	-.1613	-.0517	-.0683	-.0606	-.0466
90.000		.5743	.1324	-.3637	-.3284	-.1839	.0512	.2539	.4295	-.7025	-.7025	-.0936	-.0932	-.0872	-.0404
120.000			.1174	-.3770	-.3304	-.2183	-.0135	.1350	.1732	-.3023	-.3080	-.2073	-.1637	-.1187	-.0616
135.000								.0810		-.0136		-.2249		-.1666	
150.000			.1490	-.3470	-.3818	-.2753	-.0921	.0551	.1200	.1080	-.3251	-.4661	-.3429	-.2307	-.1273
165.000				-.3107	-.4159	-.3163	-.1375	.0016	.0862	.1825	-.0307	-.4022	-.2118	-.2080	-.0964
180.000	1.0090	.6009	.2345	-.2707	-.4332	-.3442	-.1467	-.0362	.0578	.1485	.0896	-.4464	-.2608	-.2428	-.1105
270.000		1.0020							.3575						

X/LT .7460 .8330 .9280

PHI

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(R81736)

ARC11-716 1A14 Q1+12+S12N25+AT11 EXTERNAL TANK

ALPHAT ( 4 ) = 3.733 BETAT ( 4 ) = 8.220

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI  
 .000 -.0880 -.0907 -.3203  
 30.000 -.0433 -.0337 -.3005  
 60.000 -.0427 -.0357 -.2128  
 90.000 -.0013 .0113  
 120.000 .0134 -.0074 .0345  
 135.000 .0075 .0269 -.0715  
 150.000 -.0539 -.0570 -.1870  
 165.000 .0026 .0049 .0742  
 180.000 -.0190 -.0162 -.1644

ALPHAT ( 9 ) = 8.030 BETAT ( 1 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.0340 1.0040 .5939 .0792 -.2531 -.2524 -.1258 .0166 .0566 .0017 -.0087 -.0056 .0024 .0078 .0188  
 30.000 .5497 .0300 -.2786 -.2597 -.1187 .0380 .0875 -.0334 -.0199 -.0074 -.0012 -.0077 .0075  
 60.000 .4448 -.0778 -.3282 -.2607 -.0524 .1400 .2447 -.2818 -.0564 .0145 .0034 -.0113 -.0058  
 90.000 .7440 .3204 -.1882 -.3595 -.2328 -.0100 .1864 .2825 -.4298 -.0506 -.0673 -.0647 -.0169  
 120.000 .2211 -.2831 -.3863 -.2757 -.1126 .0031 -.0309 -.2016 -.5400 -.1637 -.0368 -.0398 .0198  
 135.000 .1719 -.3326 -.4293 -.2936 -.1433 -.0015 .0347 .1360 .1217 -.3024 -.1767 -.1416 -.0317  
 150.000 .3417 -.4240 -.3080 -.1278 .0132 .0789 .2011 .0582 -.4420 -.1167 -.0836 .0137  
 165.000 1.0340 .5939 .1904 -.3516 -.4212 -.3017 -.1167 .0805 .2100 .1500 .8102 .1167 .0667 .0301  
 180.000 .7537 .2840

X/LT .7460 .8330 .9280

PHI  
 .000 .0278 -.0010 -.2279  
 30.000 .0219 .0147 -.2361  
 60.000 .0147 .0304 -.1555  
 90.000 .0347 .0163  
 120.000 .0982 .0729 .0928  
 135.000 .0993 .1094 .0633  
 150.000 .0600 .0806 -.0183  
 165.000 .1035 .1148 .0874  
 180.000 .1105 .1179 -.1216



(R81736)

ARC11-716 1A14 01+T12+S12N25+AT11 EXTERNAL TANK

ALPHAT ( 5 ) = 0.020 BETAT ( 2 ) = 4.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0180	.9814	.3783	.0326	-.2666	-.2784	-.1861	.0054	.0405	-.0142	-.0242	-.0194	-.0171	-.0093	.0036
30.000			.4624	-.0537	-.3354	-.3317	-.1810	.0052	.0776	-.0483	-.0382	-.0360	-.0313	-.0323	-.0229
60.000			.3218	-.1854	-.4037	-.3206	-.0712	.1257	.2336	-.2571	-.0869	.0029	.0077	-.2165	-.0162
90.000		.6382	.2091	-.2931	-.3850	-.2310	.0039	.2011	.3068	-.3816	-.0012	-.0907	-.0430	-.0149	
120.000			.1406	-.3551	-.3610	-.2482	-.0699	.0495	.0339	-.1997	-.4683	-.1889	-.0856	-.0585	.0022
135.000								.0423		.0144		-.2203		-.0617	
150.000			.1304	-.3748	-.3774	-.2726	-.1069	.0357	.0786	.1255	-.2386	-.3871	-.2632	-.1765	-.0386
165.000				-.3602	-.3893	-.2906	-.1156	.0167	.0876	.1937	.0029	-.4393	-.1356	-.0827	-.0058
180.000	1.0180	.6050	.1465	-.3579	-.4055	-.3120	-.1254	-.0071	.0671	.1903	.1418	-.7543	-.1234	-.1026	-.0153
270.000		.8630													.2791
X/LT	.7460	.8530	.9280												

PHI															
.000	.0070	-.0151	-.2429												
30.000	-.0040	-.0084	-.2472												
60.000	.0014	.0103	-.1727												
90.000	.0295	.0085													
120.000	.0770	.0441	.0170												
135.000	.0735	.0686	-.0341												
150.000	.0379	.0047	-.1776												
165.000	.0812	.0780	.0772												
180.000	.0812	.0851	-.1373												

ALPHAT ( 5 ) = 0.010 BETAT ( 3 ) = 9.270

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9326	.9199	.5392	.0283	-.2932	-.3102	-.1923	-.0328	-.0165	-.0598	-.0710	-.0611	-.0490	-.0314	-.0472
30.000			.3542	-.1558	-.4440	-.4233	-.1809	-.0571	.0305	-.0701	-.1241	-.0771	-.0703	-.0741	-.0686
60.000			.1681	-.3046	-.4932	-.3644	-.1032	.1043	.2533	-.1923	-.1081	-.0203	-.0256	-.0230	-.0281
90.000		.3137	.0887	-.3900	-.3319	-.2148	.0262	.2150	.3398	-.4536	.0064	.0367	-.0370	-.0370	-.0201
120.000			.0476	-.4343	-.2982	-.2148	-.0234	.1039	.0848	-.1972	-.4272	-.2140	-.1273	-.0965	-.0411
135.000								.0681		-.0015		-.2179		-.1363	
150.000			.0577	-.4343	-.3477	-.2539	-.0824	.0472	.0989	.1222	-.2907	-.4441	-.3066	-.2142	-.0931
165.000				-.4087	-.3837	-.2957	-.1238	.0007	.0792	.1513	-.0495	-.3244	-.1835	-.1742	-.0827
180.000	.9326	.4654	.1114	-.3733	-.4379	-.3371	-.1491	-.0413	.0372	.1330	.0761	-.3840	-.2062	-.2173	-.0961
270.000		.9470													
X/LT	.7460	.8530	.9280												

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(R81730)

TABULATED PRESSURE DATA - IAI4A - VOL. 9

ARC11-71.6 IAI4 OL+712+S12N29+AT11 EXTERNAL TANK

DATE 06 JAN 75

ALPHAT( 5) = 0.010 BETAT ( 3) = 0.270

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

K/LT .7480 .8530 .9280

PHI			
.000	-.0484	-.0726	-.2982
30.000	-.0312	-.0564	-.2908
60.000	-.0039	.0029	-.1635
90.000	.0156	.0193	
120.000	.0361	.0318	.0097
135.000	.0341	.0515	-.0684
150.000	-.0206	-.0244	-.1766
165.000	.0249	.0335	.0942
180.000	.0003	.0384	-.1570

ARC11-716 1A14 01+712+312N25+AT11 EXTERNAL TANK (R81737) (14 FEB 74)

## REFERENCE DATA

SREF = 2.4210 90.FT. XMRP = 29.5800 INCHES  
 LREF = 36.7090 INCHES YMRP = .0000 INCHES  
 BREF = 36.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .950 ELEVON = .000  
 RUDDER = .000 SPDRK = .000

ALPHAT (1) = -0.940 BETAT (1) = -4.050

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0320	.6424	.2228	-.2842	-.5819	-.6202	-.1603	-.0420	.0453	-.1110	-.3452	-.3472	-.0410	-.0131	.0090
30.000			.2693	-.2420	-.5512	-.6195	-.2528	.0221	-.0462	-.2763	-.4891	-.2768	-.1306	-.0625	-.0071
60.000			.3715	-.1399	-.4825	-.5361	-.1201	-.0017	-.0911	-.4662	-.7377	-.4076	-.2079	.0145	.0608
90.000		.9116	.5049	-.0728	-.3716	-.3754	.0918	.2624	.3284		-.6352	-.7063	-.2033	-.0810	.0382
120.000			.6275	.1181	-.2633	-.3241	.0681	.2649	.3945	-.0025	.0834	-.0622	-.1342	-.2199	.0452
135.000								.2229		.2307		-.1048		-.2492	
150.000			.6900	.1757	-.2175	-.2756	.0244	.1988	.3036	.3794	.0911	-.2737	-.2701	-.3459	-.0285
165.000				.1781	-.2172	-.2748	.0080	.1647	.2840	.4084	.2341	-.3366	-.2693	-.3493	-.0067
180.000	1.0320	1.0790	.6660	.1487	-.2364	-.2955	-.0022	.1383	.2781	.3994	.2477	-.3769	-.2636	-.2815	-.0593
270.000		.7090						.3351							

X/LT .7480 .8530 .9280

## PHI

.000	.0076	-.0063	-.2367
30.000	.0112	.0023	-.1780
60.000	.0362	.0275	-.0703
90.000	.0764	.0176	
120.000	.1181	-.0858	.2275
135.000	.1204	.0461	.2047
150.000	.0688	.0571	.3994
165.000	.0907	-.0790	.2712
180.000	.0741	.0607	.0522

ALPHAT (1) = -8.910 BETAT (2) = .010

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0670	.6565	.2210	-.2741	-.5875	-.6350	-.1668	-.0601	.0584	-.0966	-.3475	-.4046	-.0413	-.0099	.0284
30.000			.2375	-.2648	-.5775	-.6355	-.1559	-.0079	.0277	-.2044	-.4491	-.2997	-.1133	-.0631	-.0036
60.000			.2929	-.2153	-.5393	-.5395	.0249	.0455	-.0383	-.4152	-.7391	-.3981	-.2301	-.0623	.0443
90.000		.8135	.3956	-.1156	-.4656	-.5332	.0467	.2647	.3333		-.6965	-.7182	-.2148	-.0862	.0312
120.000			.5185	.0099	-.3686	-.4395	.0408	.2481	.3977	.0472	.0261	-.1612	-.2223	-.2701	.0140
135.000								.2027		.2215		-.2021		-.3238	
150.000			.6180	.0971	-.2962	-.3615	.0077	.1827	.2974	.3568	-.0138	-.4334	-.3303	-.4272	-.0547
180.000															

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ARC11-716 1A14 Q1+712+312M25+AT11 EXTERNAL TANK (RB1737)

ALPHAT (1) = -8.510 BETAT (2) = .010

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI				.1372	-.2622	-.3200	.0437	.1667	.2821	.4027	.1707	-.3862	-.2889	-.3493	-.0439
165.000				.1451	-.2506	-.3119	.0283	.1626	.2811	.3925	.2541	-.3867	-.2278	-.3341	-.0404
180.000	1.0770	1.0770	.6708												
270.000		.8076							.3212						

X/LT	.7480	.8530	.9280												
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PMI

.000	.0209	-.0152	-.2558												
30.000	.0140	-.0035	-.2151												
60.000	.0478	.0247	-.0648												
90.000	.0658	.0242													
120.000	.0916	-.0627	.0889												
135.000	.0888	.0139	.0167												
150.000	.0293	-.0191	-.1309												
165.000	.0751	.0272	.1093												
180.000	.0810	.0359	-.0386												

ALPHAT (1) = -8.520 BETAT (3) = 4.090

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI				-.2868	-.5946	-.6385	-.1851	-.0737	.0522	-.1179	-.3500	-.3093	-.0505	-.0172	-.0080
.000	1.0490	.6378	.2079	-.3018	-.6009	-.6410	-.1612	-.0795	.0835	-.1639	-.4174	-.2786	-.0615	-.0349	-.0111
30.000			.1994	-.2812	-.5903	-.5308	.0340	.0805	.0321	-.3626	-.6984	-.3753	-.1673	-.0701	.0131
60.000			.2163	-.2872	-.5449	-.5367	-.0191	.2782	.3474	-.7000	-.7210	-.2223	-.0649	.0043	
90.000		.7057	.2872	-.2228	-.4639	-.3265	-.0023	.2276	.4005	.0918	-.0239	-.2238	-.2483	-.0526	
120.000			.4002	-.1013	-.4639	-.3265	-.0023	.1709	.4005	.0918	-.0239	-.2238	-.2483	-.0526	
135.000			.5237	.0141	-.3685	-.4272	-.0451	.1436	.2759	.3100	-.1602	-.5131	-.4081	-.3480	-.0940
150.000				.0932	-.2944	-.3510	-.0443	.1323	.2584	.3664	.1316	-.4907	-.2462	-.2793	-.0904
165.000			.6815	.1414	-.2472	-.3107	-.0157	.1431	.2597	.3731	.2503	-.4247	-.2340	-.3416	-.0736
180.000	1.0480	1.0480													
270.000		.9077							.3124						

X/LT	.7480	.8530	.9280												
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PMI

.000	.0041	-.0199	-.2423												
30.000	.0038	-.0181	-.2355												
60.000	.0298	.0084	-.1027												
90.000	.0190	-.0266													
120.000	.0331	-.0377	-.0447												
135.000	.0275	-.0143	-.1066												
150.000	-.0220	-.0879	-.2129												



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4781

ARC11-716 1A14 Q1+T12+S12+Q5+AT11 EXTERNAL TANK

(RB1737)

ALPHAT(1) = -0.320 BETAT(3) = 4.090

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

165.000 .0248 .0048 .0851  
180.000 .0258 .0179 -.0994

ALPHAT(1) = -0.590 BETAT(4) = 0.180

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

.000 .9971 .9837 .1803 -.3133 -.6059 -.6710 -.2082 -.1156 .0155 -.1393 -.3485 -.2775 -.0940 -.0378 -.0250  
30.000 .1431 -.3364 -.6251 -.5644 -.1277 -.0033 .0871 -.1274 -.3983 -.2572 -.0818 -.0299 -.0212  
60.000 .1434 -.3302 -.6191 -.2059 -.0939 -.0227 .0933 -.3122 -.6944 -.3489 -.1487 -.0475 -.0010  
90.000 .9979 .9836 -.3043 -.6036 -.2067 -.1190 .2277 .3584 .1259 -.0568 -.2531 -.2823 -.2458 -.1512  
120.000 .2853 -.2032 -.5405 -.6031 -.0805 .1839 .3940 .1912 .3420 -.3107  
135.000 .4242 -.0752 -.4336 -.4884 -.1377 .0820 .2435 .2476 -.2200 -.6396 -.4869 -.3564 -.1882  
150.000 .0438 -.3272 -.3929 -.1515 .0615 .2109 .2940 .0833 -.6188 -.2632 -.2951 -.1849  
165.000 .9971 .9869 .6321 .1213 -.2561 -.3062 -.0316 .2106 .3259 .2314 -.4222 -.3160 -.3752 -.1959  
270.000 .9912

X/LT .7480 .8530 .9280

PMI

.000 -.0178 -.0390 -.2359  
30.000 -.0133 -.0296 -.2560  
60.000 .0113 -.0931 -.1169  
90.000 -.0564 -.1159  
120.000 -.0334 -.0946 -.0621  
135.000 -.0342 -.0295 -.1261  
150.000 -.0903 -.1262 -.2295  
165.000 -.0526 -.0375 .0405  
180.000 -.0780 -.0498 -.0994ORIGINAL PAGE IS  
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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4702

ARC11-716 1A14 Q1712+512M9+AT11 EXTERNAL TANK

0801737

ALPHAT (2) = -4.410 BETAT (1) = -0.180

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	1.0990	.7036	.2942	-.2182	-.5475	-.5510	-.3275	.0100	-.0021	-.1420	-.3174	-.2393	-.0697	-.0353	-.0479
30.000			.3999	-.1122	-.4724	-.5409	-.3931	-.0182	-.0595	-.3401	-.4036	-.2071	-.1306	-.0871	-.0372
60.000			.5316	.0189	-.3886	-.3949	-.0431	.0336	.0174	-.6401	-.6332	-.3183	-.0990	.0374	.0300
90.000		1.0480	.6435	.1235	-.2689	-.3156	.1011	.2999	.4218		-.6305	-.6729	-.1430	-.0279	.0441
120.000			.6797	.1638	-.2364	-.2892	.0629	.2398	.3070	-.2303	.0563	.0416	-.0803	-.1421	.0336
135.000								.1804		.0928		-.0161		-.1882	
150.000			.6532	.1347	-.2653	-.3120	-.0783	.1450	.2032	.3083	.2580	-.1680	-.2495	-.2657	-.0346
165.000				.0745	-.3206	-.3622	-.1071	.0902	.1648	.3448	.2483	-.9434	-.2192	-.2972	-.0326
180.000	1.0990	.9765	.5300	.0100	-.3645	-.4276	-.0688	.0625	.1925	.3392	.1984	-.4246	-.2784	-.3044	-.0781
270.000		.6596							.4857						

W/LT

.7480

.8330

.9280

PHI

.000	-.0800	-.0321	-.2297												
30.000	-.0139	-.0116	-.1926												
60.000	.0422	.0714	-.0614												
90.000	.0858	.0366													
120.000	.1524	.0345	.3288												
135.000	.1990	.1588	.3278												
150.000	.1095	.1956	.2395												
165.000	.1157	.1810	.3710												
180.000	.0765	.1191	.1088												

ALPHAT (2) = -4.390 BETAT (2) = -4.090

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6360
PHI															
.000	1.1120	.7342	.3240	-.1992	-.5319	-.5987	-.1551	-.0368	.0632	-.1021	-.3220	-.3431	-.0229	-.0100	-.0022
30.000			.3755	-.1425	-.4989	-.5622	-.2411	.0440	.0236	-.2532	-.3825	-.2386	-.0683	-.0678	-.0176
60.000			.4548	-.0656	-.4333	-.4608	-.2365	.1142	.0635	-.5941	-.6225	-.3426	-.1688	-.0080	.0431
90.000		.9630	.5395	.0161	-.3687	-.4365	.1011	.3139	.4342		-.6281	-.7187	-.1784	-.0480	.0311
120.000			.5888	.0670	-.3269	-.3899	.1201	.2514	.3280	-.1784	-.0729	-.0626	-.1259	-.2048	-.0194
135.000								.1979		.1083		-.1216		-.2352	
150.000			.6059	.0772	-.3155	-.3633	-.0037	.1690	.2365	.2951	.0526	-.2839	-.2859	-.3233	-.0433
165.000			.5569	.5569	-.3325	-.4079	-.0327	.1324	.2242	.3478	.1960	-.3711	-.2555	-.3269	-.0256
180.000	1.1120	.9929	.5563	.0263	-.3601	-.4258	-.0316	.1155	.2258	.3437	.2103	-.4319	-.2527	-.2862	-.0576
270.000		.7649							.4822						

W/LT

.7480

.8330

.9280

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OL+112+512N2+AT11 EXTERNAL TANK (R01737)

ALPHAT( 2) = -4.390 BETAT ( 2) = -4.090

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.7480	.8530	.9580
PWT			
.000	.0000	-.0064	-.2232
30.000	.0169	.0174	-.1771
60.000	.0562	.0890	-.0684
90.000	.0910	.0677	
120.000	.1245	.0285	.2542
150.000	.1284	.1156	.2572
180.000	.0877	.1120	.1467
210.000	.1081	.1334	.2667
240.000	.0877	.1048	.0530

ALPHAT( 3) = -4.390 BETAT ( 3) = -.020

## SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5590	.6380
PWT															
.000	1.1280	.7667	.3282	-.1991	-.5273	-.5656	-.1937	-.0231	.0765	-.0925	-.3169	-.3877	-.0071	-.0020	.0147
30.000			.3359	-.1912	-.5214	-.5886	-.1441	.0334	.0796	-.1655	-.3706	-.2945	-.0395	-.0271	-.0156
60.000			.3714	-.1549	-.4978	-.4661	-.1944	.1709	.1042	-.3460	-.6051	-.3570	-.1230	-.0328	.0198
90.000		.8655	.4263	-.0945	-.4540	-.5202	.0824	.3300	.4401		-.6331	-.7341	-.1788	-.0546	.0290
120.000			.4901	-.0336	-.4030	-.4727	.0421	.2461	.3449	-.1203	-.0632	-.1640	-.1891	-.2278	.0057
150.000							.1974	.1720	.1315			-.2073		-.2821	
180.000			.5376	.0108	-.3695	-.4423	-.0046	.1720	.2538	.2836	-.0770	-.4217	-.2898	-.3717	-.0318
210.000				.0303	-.3548	-.4324	-.0077	.1468	.2359	.3384	.1218	-.4414	-.2358	-.3007	-.0346
240.000	1.1280	.9937	.5622	.0349	-.3551	-.4265	.0026	.1571	.2159	.3359	.2151	-.4678	-.2035	-.2885	-.0366
270.000		.8661						.4364							

K/LT	.7480	.8530	.9280
PWT			
.000	.0247	.0069	-.2304
30.000	.0101	.0113	-.2105
60.000	.0468	.0905	-.0905
90.000	.0702	.0661	
120.000	.0956	-.0149	.1215
150.000	.0961	.0572	.0590
180.000	.0905	.0323	-.0712
210.000	.0885	.0672	.0928
240.000	.0910	.0744	-.0803

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ARC11-716 IAI4 CR+712+312M+AT111 EXTERNAL TANK

08017371

ALPHAT ( 2 ) = -4.990 BETAT ( 4 ) = 4.000

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5900	.6300
PMI															
.000	1.1030	.7466	.3137	-.2061	-.5332	-.6024	-.1781	-.0259	.0652	-.1132	-.3203	-.3247	-.0239	-.0151	-.0080
30.000			.2982	-.2290	-.5553	-.6153	-.1357	.0006	.1085	-.1420	-.3740	-.2725	-.0216	-.0141	-.0031
60.000			.2848	-.2290	-.5528	-.5484	-.1062	.1677	.1545	-.4770	-.6224	-.3164	-.0760	-.0215	-.0039
90.000		.7583	.3154	-.1977	-.5322	-.4926	.0001	.2382	.4674	-.6388	-.6388	-.1612	-.0368	-.0029	
120.000			.3772	-.1336	-.4838	-.5560	-.0012	.1895	.3522	-.0675	-.1071	-.2346	-.2207	-.1924	-.0495
150.000								.1689		.1401	-.2938		-.2439		
180.000			.4574	-.0642	-.4338	-.5020	-.0471	.1460	.2528	.2618	-.2080	-.5250	-.3964	-.3290	-.0909
210.000				-.0075	-.3861	-.4599	-.0685	.1216	.2233	.3200	.0826	-.5307	-.2357	-.2568	-.0793
240.000	1.1030	.9896	.5517	.0228	-.3566	-.4289	-.0476	.1167	.2120	.3215	.2117	-.4634	-.2264	-.3117	-.0744
270.000		.9591						.4220							

M/LT .7460 .8530 .9280

PMI

.000	-.0005	-.0104	-.2287
30.000	-.0111	-.0016	-.2362
60.000	.0196	.0225	-.1275
90.000	.0347	.0274	
120.000	.0442	-.0109	-.0023
150.000	.0417	.0227	-.0717
180.000	.0007	-.0455	-.1807
210.000	.0435	.0368	.0667
240.000	.0446	.0495	-.1038

ALPHAT ( 2 ) = -4.410 BETAT ( 5 ) = 8.150

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5900	.6300
PMI															
.000	1.0510	.8839	.2953	-.2240	-.5446	-.6179	-.2283	-.0517	.0110	-.1564	-.3324	-.2187	-.0551	-.0226	-.0494
30.000			.2207	-.2768	-.5918	-.5884	-.1851	.0079	.1156	-.1193	-.3835	-.1513	-.0302	-.0261	-.0183
60.000			.2021	-.2970	-.5936	-.4131	-.0828	.1366	.1832	-.4410	-.6180	-.2076	-.0454	-.0294	-.0180
90.000		.8528	.2179	-.2777	-.5680	-.0843	-.0499	.0726	.3018	-.6167	-.4606	-.0973	-.0973	-.0471	-.0418
120.000			.2746	-.2275	-.5902	-.3173	-.0481	.1233	.3524	-.1153	-.1291	-.2783	-.2359	-.1936	-.1126
150.000								.1069		.1414	-.3569		-.2602		
180.000			.3664	-.1444	-.4821	-.5536	-.0728	.0885	.2341	.2556	-.2637	-.6384	-.4291	-.3047	-.1823
210.000				-.0579	-.4238	-.4891	-.1063	.0637	.1841	.2759	.0496	-.6947	-.2712	-.2887	-.1595
240.000	1.0510	.8861	.5274	.0081	-.3665	-.4334	-.0931	.0685	.1972	.2693	.2015	-.4606	-.3268	-.3372	-.1567
270.000		1.0480						.4121							

M/LT .7460 .8530 .9280

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4705

ARC11-716 1A14 01+718+912N23-AT11 EXTERNAL TANK

(R01737)

ALPHAT( 8 ) = -4.410 BETAT ( 5 ) = 0.190

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7460 .0330 .0200

PHI  
 .000 -.0026 -.0342 -.2376  
 30.000 -.0022 -.0069 -.2376  
 60.000 -.0009 .0009 -.1321  
 90.000 -.0253 -.0317  
 120.000 -.0075 -.0314 -.0307  
 150.000 -.0130 .0106 -.0846  
 180.000 -.0325 -.0734 -.1945  
 210.000 -.0242 -.0012 .0837  
 240.000 -.0417 -.0141 -.1045

ALPHAT( 9 ) = -.580 BETAT ( 1 ) = -0.170

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380  
 PHI  
 .000 1.0790 .0005 .3905 -.1235 -.4859 -.5405 -.4465 .0435 .0007 -.1305 -.3055 -.1633 -.0638 -.0364  
 30.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 60.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 90.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 120.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 150.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 180.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 210.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 240.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

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ARC11-716 IAL14 CL+712-312M25-AT11 EXTERNAL TANK

08017377

ALPHAT (3) = -.310 BETAT (2) = -4.000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0060	.0400	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
PHI															
.000	1.1380	.8548	.4257	-.1076	-.4082	-.5308	-.3172	.0517	.0673	-.0810	-.3081	-.1532	-.0077	-.0175	-.0085
30.000			.4766	-.0544	-.4246	-.5018	-.2135	.0796	.0676	-.1049	-.3023	-.1588	-.0360	-.0436	-.0219
60.000			.3268	-.0098	-.3640	-.4249	-.1429	.1832	.1684	-.1762	-.4853	-.2058	-.0347	-.0087	.0291
90.000		.8818	.5469	.0178	-.3632	-.3734	.1497	.3368	.4689	-.6264	-.6381	-.1378	-.0493	.0388	.0388
120.000			.5354	.0099	-.3677	-.4442	.0384	.2117	.2428	-.3140	-.2119	-.0376	-.0806	-.1558	.0204
150.000							.1659	.1659		.0170		-.1381		-.1830	
180.000			.5108	-.0175	-.3931	-.4481	-.1787	.1414	.1726	.2366	.0204	-.2365	-.2220	-.2561	-.0287
190.000				-.0488	-.4111	-.4898	-.0740	.1644	.1725	.2917	.1485	-.3578	-.2034	-.2559	-.0009
160.000	1.1380	.9026	.4485	-.0775	-.4340	-.5089	-.0684	.0972	.1920	.2868	.1685	-.4693	-.1839	-.2319	-.0297
270.000		.7854													
W/LT	.7480	.8330	.9290												

.5136

ALPHAT (3) = -.310 BETAT (2) = .010

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0060	.0400	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
PHI															
.000	1.1400	.8714	.4321	-.0867	-.4380	-.5294	-.3021	.0330	.0976	-.0617	-.3058	-.1873	.0087	-.0002	.0043
30.000			.4367	-.0932	-.4373	-.5340	-.1714	.0307	.1225	-.1245	-.3294	-.1478	-.0132	-.0229	-.0048
60.000			.4367	-.0934	-.4302	-.5226	-.0688	.1976	.2137	-.4239	-.5058	-.2449	-.0019	-.0004	.0138
90.000		.8867	.4421	-.0626	-.4482	-.4494	.0505	.3000	.4882	-.7522	-.2761	-.0975	-.0454	.0107	.0107
120.000			.4485	-.0765	-.4488	-.5142	.0215	.2403	.2844	-.2454	-.2361	-.1334	-.1058	-.1701	.0033
150.000							.1786	.1786		.0528		-.1747		-.2138	
180.000			.4802	-.0885	-.4393	-.5026	-.0482	.2133	.2133	.2344	-.1413	-.3695	-.2280	-.2922	-.0440
190.000				-.0574	-.4335	-.5059	-.0474	.0089	.2018	.2859	.0809	-.4382	-.1609	-.2705	-.0290
160.000	1.1400	.9045	.4397	-.0659	-.4375	-.5029	-.0290	.0628	.1844	.2879	.1786	-.5145	-.2746	-.2211	-.0267
270.000		.8900													
W/LT	.7480	.8330	.9290												

PHI



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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 01+T12+SIEN23+AT11 EXTERNAL TANK

(RB1737)

ALPHAT ( 3 ) = -.510 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8330 .9280

PMI

.000 .0269 .0277 -.1909  
 30.000 .0291 .0359 -.1719  
 60.000 .0476 .0596 -.0835  
 90.000 .0791 .0918  
 120.000 .1111 .0402 .1575  
 135.000 .1116 .0970 .1013  
 150.000 .0768 .0839 .0234  
 165.000 .1095 .1079 .0625  
 180.000 .1097 .1105 -.0783

ALPHAT ( 3 ) = -.510 BETAT ( 4 ) = 4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .6300

PMI

.000 1.1270 .8439 .4160 -.1093 -.4764 -.5402 -.3942 .0263 .0744 -.0876 -.3132 -.1895 -.0189 -.0834 -.0146  
 30.000 .3607 .1628 -.5122 -.5587 -.3107 .0993 .1342 -.1034 -.3787 -.1370 -.0121 -.0836 -.0166  
 60.000 .3315 -.1986 -.5272 -.5904 -.1070 .1029 .2559 -.3792 -.9089 -.2201 -.0270 -.0236 -.0097  
 90.000 .7780 .3282 -.1942 -.5287 -.4866 -.0228 .3563 .5034 -.6995 -.0607 .0100 -.0675 -.0781  
 120.000 .3451 -.1775 -.5183 -.5825 -.0665 .1211 .3226 -.1804 -.2503 -.1516 -.1318 -.1852 -.0293  
 135.000 .3872 -.1422 -.4921 -.5556 -.0724 .0749 .2256 .2055 -.2487 -.4539 -.3256 -.3247 -.0710  
 150.000 .1051 -.4723 -.5363 -.1072 .0921 .2009 .2809 .0388 -.5837 -.1801 -.2193 -.0866  
 165.000 1.1270 .9097 .4516 -.4510 -.5148 -.1356 .1214 .1816 .2730 .1772 -.5056 -.1788 -.0596  
 180.000 .9863  
 270.000 .4656

X/LT .7480 .8330 .9280

PMI

.000 .0092 .0034 -.1906  
 30.000 .0181 .0218 -.1911  
 60.000 .0264 .0413 -.0733  
 90.000 .0253 .0521  
 120.000 .0728 .0239 .0211  
 135.000 .0766 .0626 -.0327  
 150.000 .0431 .0064 -.1501  
 165.000 .0775 .0798 .0936  
 180.000 .0808 .0919 -.0825

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ARC11-716 IA14 CR+71E-912N25-AT11 EXTERNAL TANK (R0137)

ALPHAT( 3) = -.320 BETAT ( 5) = 8.190

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0700	.7927	.3821	-.1316	-.4850	-.5576	-.6126	-.0131	.0100	-.1436	-.2930	-.2452	-.0719	-.0742	-.0666
30.000			.2657	-.2246	-.5516	-.6118	-.1718	-.0224	.1201	-.0942	-.3600	-.1214	-.0304	-.0427	-.0296
60.000			.2408	-.2690	-.5781	-.3971	-.1065	.0741	.2420	-.3417	-.5123	-.1752	-.0509	-.0429	-.0293
90.000		.6646	.2227	-.2685	-.5822	-.4579	-.0142	.2753	.5256		-.6821	-.0137	-.0211	-.1381	-.1476
120.000			.2443	-.2569	-.5718	-.1186	-.0725	-.0054	.2448	-.1351	-.2976	-.1887	-.1786	-.1943	-.0839
135.000							.0207		.0772			-.2923		-.2193	
150.000			.3036	-.2140	-.5392	-.3528	-.0766	.0300	.2061	.1863	-.2951	-.5665	-.3249	-.3036	-.1239
165.000				-.1513	-.4976	-.5662	-.0872	.0379	.1541	.2324	.0186	-.7084	-.2348	-.2464	-.1200
180.000	1.0700	.7784	.4222	-.0986	-.4594	-.5300	-.0880	.0408	.1077	.2409	.1653	-.4798	-.2866	-.3018	-.1283
270.000		1.0720													

X/LT .7460 .8530 .9280

PHI

.000	-.0375	-.0322	-.2312
30.000	-.0058	-.0063	-.2065
60.000	-.0006	.0131	-.0916
90.000	-.0588	-.0081	
120.000	.0250	.0118	-.0437
135.000	.0209	.0487	-.0535
150.000	-.0122	-.0286	-.1634
165.000	.0136	.0400	.1278
180.000	.0031	.0313	-.0942

ALPHAT( 4) = 3.960 BETAT ( 1) = -8.210

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0660	.9000	.5027	-.0168	-.3967	-.4707	-.4629	.0381	.0256	-.0907	-.1626	-.1587	-.0426	-.0497	-.0485
30.000			.6220	.0985	-.2993	-.3743	-.2115	.0483	.0723	-.1830	-.1134	-.1438	-.0206	-.0270	-.0160
60.000			.6788	.1548	-.2503	-.3150	.0383	.1999	.2388	-.4023	-.3014	-.1136	.0349	.0413	.0393
90.000		1.0500	.6491	.1286	-.2750	-.2983	.1576	.3018	.4292		-.4661	-.2065	-.0400	-.0690	-.0009
120.000			.5446	.0278	-.3580	-.4251	-.0544	.0935	.0794	-.3633	-.4997	-.1019	.1291	.0196	.0443
135.000								.0420		.0178		-.1334		-.0175	
150.000			.4385	-.0785	-.4415	-.5105	-.3334	.0315	.0237	.2174	.0663	-.2804	-.0852	-.1368	-.0013
165.000				-.1511	-.5052	-.4895	-.3134	.0535	.0688	.2513	.1365	-.2840	-.0865	-.1608	.0100
180.000	1.0660	.7751	.3104	-.2035	-.5285	-.5543	-.1417	.0323	.1299	.2520	.1245	-.4957	-.1480	-.1881	-.0228
270.000		.6556													

X/LT .7460 .8530 .9280

PHI



DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 Q1+712+512M25+AT11 EXTERNAL TANK (R81737)

ALPHAT ( 4 ) = 3.960 BETAT ( 1 ) = -8.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0228 -.0219 -.1923  
 30.000 .0241 .0415 -.1732  
 60.000 .0737 .1135 -.0577  
 90.000 .0784 .0256  
 120.000 .2108 .1876 .3639  
 135.000 .2175 .2609 .3816  
 150.000 .1755 .2325 .3115  
 165.000 .1886 .2312 .3841  
 180.000 .1520 .1880 .1198

ALPHAT ( 4 ) = 3.960 BETAT ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI  
 .000 1.1190 .9558 .5423 .0031 -.3802 -.4581 -.5387 .0853 .0889 -.0421 -.2243 -.1050 -.0146 -.0105 .0014  
 30.000 .5808 .0484 -.3449 -.4291 -.4000 .1376 .1275 -.1125 -.1125 -.3527 -.3183 -.2066 .0123 .0264 .0221  
 60.000 .5841 .0525 -.3406 -.4152 -.0135 .2150 .2625 -.3527 -.5313 -.2557 .0159 -.0396 -.0294  
 90.000 .5390 .0132 -.3741 -.4411 .1022 .3145 .4435 .1309 -.3040 -.4725 -.1934 .0448 -.0471 .0073  
 120.000 .4637 -.0592 -.4248 -.5022 -.0368 .1486 .1158 .0958 .1291 .2500 .1247 -.3736 -.1280 -.1696 .0055  
 135.000 .4004 -.1216 -.4819 -.5009 -.2896 .1148 .0511 .1498 .2302 .1496 -.5306 -.1226 -.1443 -.0181  
 150.000 .1500 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 165.000 .1650 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 180.000 .1800 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 270.000 .7692

X/LT .7460 .8530 .9280

PHI  
 .000 .0239 .0327 -.1426  
 30.000 .0411 .0603 -.1235  
 60.000 .0693 .1105 -.0182  
 90.000 .0914 .1496  
 120.000 .1626 .1680 .2463  
 135.000 .1762 .2148 .2452  
 150.000 .1481 .1837 .1762  
 165.000 .1649 .1987 .2854  
 180.000 .1437 .1711 .0698

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ARC11-716 1A14 CE+T12+S12N29+AT11 EXTERNAL TANK (R81737)

ALPHAT( 4) = 3.950 BETAT ( 3) = .000

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5380	.6380
PHI	.000	1.1330	.9717	.5446	.0137	-.3725	-.4302	-.5395	.0974	.1120	-.0232	-.2322	-.1347	.0015	.0036
30.000				.5278	-.0039	-.3882	-.4631	-.4884	.1263	.1519	-.0679	-.2482	-.1460	.0041	.0056
60.000				.4878	-.0411	-.4178	-.4851	-.0580	.1757	.2851	-.3050	-.3340	-.1707	-.0120	-.0059
90.000			.8728	.4361	-.0906	-.4375	-.5279	.0070	.3145	.4645	-.5959	-.2511	-.0115	-.0632	-.0447
120.000				.3859	-.1386	-.4942	-.5226	-.1191	.1970	.1829	-.2998	-.4270	-.1986	-.0189	.0045
150.000								.1537	.1537	.0261			-.2953	-.1134	
180.000				.3613	-.1701	-.5132	-.5689	-.1224	.1110	.1590	-.1258	-.3849	-.1509	-.1875	-.0332
210.000					-.1814	-.5173	-.5815	-.0914	.0303	.1675	.2595	.0893	-.4406	-.1176	-.1474
240.000			.7898	.3421	-.0859	-.5231	-.5765	-.0649	.0070	.1583	.2610	.1711	-.5798	-.1127	-.0029
270.000			.8710						.4660						

X/LT .7480 .8530 .9280

## PHI

.000	.0398	.0491	-.1354
30.000	.0385	.0808	-.1333
60.000	.0452	.0835	-.0260
90.000	.0661	.1180	
120.000	.1278	.1065	.1407
150.000	.1288	.1382	.1065
180.000	.1032	.1172	.0419
210.000	.1275	.1374	.0761
240.000	.1323	.1397	-.0817

ALPHAT( 4) = 3.950 BETAT ( 4) = 4.110

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5380	.6380
PHI	.000	1.1180	.9475	.5285	.0032	-.3830	-.4603	-.5489	.0671	.0923	-.0457	-.2305	-.1130	-.0170	-.0135
30.000				.4504	-.0711	-.4433	-.5157	-.4806	.1307	.1501	-.0542	-.3013	-.0831	-.0145	-.0222
60.000				.3810	-.1468	-.5006	-.5598	-.0941	.1653	.3050	-.2616	-.3379	-.1138	-.0408	-.0232
90.000			.7686	.3286	-.1947	-.5310	-.2780	-.0511	.1304	.5011	-.7124	-.1798	-.0201	-.0927	-.0611
120.000				.2978	-.2124	-.5528	-.5180	-.0838	.1653	.2218	-.2168	-.3878	-.1631	-.0793	-.1179
150.000								.0780	.0780	.0367			-.2572	-.1417	
180.000				.3054	-.2165	-.5546	-.5035	-.1200	.0070	.2042	.1896	-.2232	-.4522	-.2409	-.0447
210.000					-.2052	-.5417	-.6081	-.1262	.0081	.1776	.2333	.0320	-.5783	-.1328	-.1381
240.000			.7942	.3365	-.1921	-.5300	-.5912	-.1074	.0293	.1333	.2440	.1681	-.5506	-.1245	-.1695
270.000			.9687						.4458						-.0332

X/LT .7460 .8530 .9280

## PHI

.000	.0398	.0491	-.1354
30.000	.0385	.0808	-.1333
60.000	.0452	.0835	-.0260
90.000	.0661	.1180	
120.000	.1278	.1065	.1407
150.000	.1288	.1382	.1065
180.000	.1032	.1172	.0419
210.000	.1275	.1374	.0761
240.000	.1323	.1397	-.0817



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TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4701

ARC11-716 IA14 C5-T12-312N23-AT11 EXTERNAL TANK

(R01737)

ALPHAT(4) = 3.950 BETAT(4) = 4.110

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI

.000	.0237	.0318	-.1382
30.000	.0229	.0405	-.1477
60.000	.0260	.0558	-.0624
90.000	.0492	.0850	
120.000	.0953	.0755	.0299
135.000	.0930	.0932	-.0235
150.000	.0655	.0405	-.1382
165.000	.0975	.1073	.1139
180.000	.1032	.1134	-.0734

ALPHAT(4) = 3.960 BETAT(4) = 8.210

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0480 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .6380

PHI

.000	1.0600	.9003	.5346	-.0121	-.3920	-.4720	-.5508	-.0059	.0267	-.1002	-.1653	-.2342	-.0412	-.0330	-.0455
30.000			.3667	-.1463	-.4979	-.5741	-.3831	.0248	.1244	-.0466	-.2946	-.0832	-.0292	-.0422	-.0340
60.000			.2707	-.2411	-.5580	-.5212	-.2385	.1763	.3022	-.2145	-.3554	-.0448	-.0445	-.0610	-.0310
90.000		.6326	.2156	-.2822	-.5840	-.1454	-.1291	.1441	.5052	-.7388	-.1262	-.0553	-.0890	-.0445	
120.000			.2028	-.2930	-.5942	-.2556	-.0799	.1180	.2417	-.2509	-.3973	-.1502	-.1566	-.1674	-.0491
135.000								.0111		.0369		-.2352		-.1803	
150.000			.2203	-.2766	-.5838	-.2348	-.1247	-.0068	.1835	.1613	-.3101	-.4869	-.2879	-.2685	-.0945
165.000		.6686	-.2429	-.5626	-.6175	-.1286	.0057	.1539	.2063	.2063	.0025	-.6493	-.1814	-.1986	-.0896
180.000	1.0600	1.0590	.3087	-.2032	-.5317	-.6058	-.1050	.0178	.0954	.2063	.1244	-.5184	-.2005	-.2513	-.1084
270.000															

X/LT .7480 .8530 .9280

PHI

.000	-.0240	-.0195	-.1909
30.000	-.0056	.0103	-.1685
60.000	.0021	.0305	-.1045
90.000	.0286	.0721	
120.000	.0577	.0632	.0585
135.000	.0470	.0866	-.0202
150.000	.0101	.0132	-.1346
165.000	.0397	.0680	.0522
180.000	.0231	.0529	-.0690

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ARC11-716 1A14 CR+T12+S12M25+AT11 EXTERNAL TANK (R01T37)

ALPHAT ( 1 ) = 7.900 BETAT ( 1 ) = -8.190

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	1.0200	.9817	.6076	.0944	-.3069	-.3826	-.3768	.0293	.0391	-.1454	-.1192	-.0716	-.0263	-.0246	-.0290
30.000			.7221	.2017	-.2068	-.2871	-.2502	.0966	.1269	-.1025	-.0717	-.0288	.0286	.0284	.0344
60.000			.7254	.2073	-.1974	-.2669	.0355	.2364	.3114	-.2911	-.1739	-.0513	.0867	.0829	.0699
90.000				.0020	.6181	.1058	-.2876	-.3492	.2469	.3418	-.4034	-.2195	.0376	.0477	.0257
120.000					.4499	-.0558	-.4307	-.4770	-.1337	-.0451	-.0751	-.1340	-.0921	.0784	.0377
135.000								-.0646		.0226		-.2545		.0620	
150.000					.3220	-.1811	-.5300	-.5894	-.3258	.1923	-.0422	-.2809	-.0182	-.0746	.0007
165.000						-.2539	-.5822	-.5421	-.3360	.0079	.1075	-.2840	-.0422	-.0979	.0191
180.000	1.0200	.6619	.2042	-.2947	-.6045	-.5358	-.1675	-.0164	.1279	.2240	.1146	-.5401	-.1020	-.1283	-.0057
270.000		.6048							.4374						

X/LT .7460 .6330 .9280

## PHI

.000	-.0029	.0009	-.1459
30.000	.0372	.0804	-.0929
60.000	.1040	.1474	.0153
90.000	.1383	.1973	
120.000	.1925	.2145	.2413
135.000	.2106	.2559	.3114
150.000	.1623	.2155	.2459
165.000	.1794	.2152	.3101
180.000	.1418	.1723	.0777

ALPHAT ( 1 ) = 8.010 BETAT ( 2 ) = -4.130

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	1.0710	1.0420	.6483	.1203	-.2893	-.3685	-.4558	.0815	.1132	.0040	-.1293	-.0264	.0161	.0145	.0807
30.000			.6789	.1501	-.2640	-.3447	-.3328	.1322	.1671	-.0415	-.0959	-.0354	.0263	.0293	.0391
60.000			.6269	.1037	-.3009	-.3790	.0008	.2399	.3282	-.2463	-.1968	-.0876	.0553	.0324	.0468
90.000			.9132	-.0039	-.3689	-.4601	.0623	.2693	.3452	-.4330	-.3293	-.0324	-.0239	-.0131	-.0131
120.000			.3784	-.1338	-.4884	-.5593	-.1099	.0442	-.0065	-.1335	-.4046	-.2802	.0427	.0214	.0270
135.000								.0312		.0360		-.3552		.0017	
150.000			.2918	-.8186	-.5453	-.5213	-.3034	.0407	.0355	.2123	-.0786	-.3630	-.0830	-.0940	-.0066
165.000				-.2564	-.5850	-.5487	-.1543	.0132	.1176	.2402	.1037	-.3840	-.0724	-.0719	.0229
180.000	1.0710	.6709	.2262	-.2781	-.5047	-.2829	-.1273	-.0643	.1435	.2279	.1488	-.5916	-.1017	-.0758	.0042
270.000		.7195							.3650						

X/LT .7460 .6330 .9280

## PHI



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4703

ARC11-716 1A14 0A-T12-S12N25+AT11 EXTERNAL TANK

(081137)

ALPHAT ( 5 ) = 0.010 BETAT ( 2 ) = -4.100

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI	0.000	0.0475	0.0995	-0.0936
30.000	0.0705	0.0987	-0.0651	
60.000	0.0864	0.1396	0.0487	
90.000	0.1215	0.2003		
120.000	0.1668	0.2036	0.1908	
135.000	0.1801	0.2238	0.1900	
150.000	0.1906	0.1839	0.1427	
165.000	0.1688	0.1967	0.2266	
180.000	0.1470	0.1698	0.0403	

ALPHAT ( 5 ) = 0.010 BETAT ( 3 ) = .010

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI	0.000	1.0860	1.0380	.6520	.1249	-.2848	-.3682	-.4554	.1141	.1323	.0197	-.1641	-.0091	.0124	.0198	.0311
30.000				.6133	.0866	-.3180	-.3999	-.4653	.1341	.1746	-.0112	-.1678	-.0071	.0075	.0113	.0198
60.000				.5140	-.0075	-.3928	-.4658	-.5179	.2496	.3352	-.2003	-.2109	-.0347	.0037	.0096	.0003
90.000			.8191	.3980	-.1140	-.4790	-.5489	-.0800	.2847	.3660	-.5073	-.1751	-.0491	-.0475	-.0012	
120.000			.3016	-.2093	-.5441	-.6075	-.1214	.0828	.0612	-.1326	-.4982	-.2424	-.0143	-.0383	.0157	
135.000				.2982	-.2491	-.5745	-.5481	-.2294	.0682	.1126	.2106	-.0739	-.4093	-.1340	-.1323	-.0271
150.000					-.2617	-.5836	-.6369	-.1710	-.0445	.1766	.2485	.0998	-.4413	-.0967	-.0988	.0190
165.000		1.0860	.6696	.2307	-.2686	-.5943	-.6318	-.1677	-.0255	.1779	.2551	.1766	-.6075	-.1006	-.0751	.0293
180.000			.8234							.3718						

X/LT .7480 .8530 .9280

PMI	0.000	0.0990	0.0710	-0.0857
30.000	0.0574	0.0774	-0.1021	
60.000	0.0631	0.1045	-0.1194	
90.000	0.0958	0.1431		
120.000	0.1422	0.1477	0.1477	
135.000	0.1435	0.1667	0.1088	
150.000	0.1134	0.1429	0.0510	
165.000	0.1419	0.1608	0.1191	
180.000	0.1469	0.1570	-0.0581	

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ARC11-716 1A14 01+712+S12N25+AT11 EXTERNAL TANK

(RB1737)

ALPHAT ( S ) = 8.000 BETAT ( A ) = 4.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	1.0360	.6339	.1099	-.2931	-.3739	-.4623	.0808	.1094	-.0026	-.1286	-.0297	.0103	.0126	.0197
30.000	.5282	.0070	-.3802	-.4598	-.4307	-.4307	.1460	.1584	.1584	-.0116	-.2096	-.0266	-.0022	-.0112	-.0048
60.000	.3990	-.1162	-.4803	-.5085	-.3311	-.2357	.3354	.3354	.3354	-.1631	-.2386	.0154	.0024	-.0117	-.0061
90.000	.7156	.2930	-.2175	-.5532	-.5650	-.0821	.3124	.3826	.3826	-.4998	-.0764	-.0489	-.0551	.0016	.0016
120.000	.2264	-.2761	-.5938	-.6151	-.1114	.1192	.1245	.1245	.1245	-.1724	-.4850	-.2105	-.0856	-.0848	.0047
135.000						.0776	.0776	.0776	.0776	.0389	-.2520	-.2520	-.1088		
150.000	.2103	-.2944	-.6039	-.5690	-.1606	.0204	.1669	.1669	.1669	.1920	-.2140	-.3923	-.2097	-.1895	-.0384
165.000						-.2875	-.5940	-.3709	-.1662	.0194	.0354	.5229	-.1141	-.0980	-.0094
180.000	1.0710	.6775	.2284	-.2830	-.5922	-.5969	-.1503	-.0030	.1370	.2316	.1622	-.6101	-.1090	-.1000	-.0186
270.000	.9244														

X/LT .7460 .8530 .9280

PHI

.000	.0427	.0601	-.0950
30.000	.0342	.0568	-.1195
60.000	.0304	.0611	-.0950
90.000	.0619	.0560	
120.000	.1001	.0977	.0425
135.000	.0934	.1103	-.0176
150.000	.0621	.0319	-.1347
165.000	.0977	.1114	-.1134
180.000	.1077	.1068	-.0883

ALPHAT ( S ) = 7.990 BETAT ( S ) = 8.280

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.9816	.6054	.0951	-.3036	-.3775	-.4342	-.0240	.0429	-.0556	-.1208	-.0819	-.0232	-.0228	-.0299
30.000	.4303	-.0762	-.4503	-.5230	-.5926	-.5926	.0173	.1088	.1088	-.0166	-.2165	-.0732	-.0351	-.0438	-.0386
60.000	.2744	-.2281	-.5811	-.5139	-.2979	.1601	.3263	.3263	.3263	-.1235	-.2364	-.0002	.0025	.0154	-.0084
90.000	.5965	.1793	-.3060	-.5632	-.4904	-.1326	.2491	.4046	.4046	-.4092	.0138	-.0267	-.0267	-.0684	-.0194
120.000	.1416	-.3370	-.5639	-.4567	-.0930	.1173	.1617	.1617	.1617	-.1641	-.4214	-.1938	-.1234	-.1343	-.0384
135.000						.0226	.0226	.0226	.0226	.0371	-.2263	-.2263	-.1617		
150.000	.1517	-.3445	-.6307	-.2233	-.1802	-.0533	.1801	.1801	.1801	.1576	-.2496	-.4155	-.2651	-.2297	-.0783
165.000						-.3225	-.6241	-.2560	-.1676	.1389	.1919	-.0090	-.4242	-.1586	-.0809
180.000	1.0090	.5420	.2015	-.3064	-.6044	-.6392	-.1630	-.0251	.0804	.1737	.0972	-.4886	-.1575	-.2183	-.0925
270.000	1.0080														

X/LT .7460 .8530 .9280

PHI



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(R81737)

ARC11-716 1A14 CR+T12+512MS+AT11 EXTERNAL TANK

ALPHAT ( S ) = 7.990 BETAT ( S ) = 8.260

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .6330 .9200

PHI			
.000	-.0007	.0049	-.1454
30.000	-.0148	.0079	-.1483
60.000	.0246	.0172	-.0736
90.000	.0304	.0739	
120.000	.0648	.0826	.0367
135.000	.0561	.0920	-.0262
150.000	.0135	.0192	-.1297
165.000	.0455	.0682	.1280
180.000	.0322	.0496	-.1133

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ARC11-716 1A14 OL+712-S12M2-AT11 EXTERNAL TANK

(R81736)

(14 FEB 74)

## REFERENCE DATA

SRF = 2.4210 98.FT. MRP = 29.9800 INCHES  
 LRF = 36.7090 INCHES MRP = .0000 INCHES  
 BRP = 36.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = 1.050 ELEVON = .000  
 RUDDER = .000 SPOILER = .000

ALPHAT(1) = -0.600 BETAT(1) = -0.150

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0640	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5360
PHI	.000	1.0650	.6807	.3004	-.1639	-.5001	-.5484	-.4826	.0767	-.0592	-.2262	-.3079	-.1807	-.0804
30.000				.3891	-.0867	-.4388	-.5378	-.5312	-.0503	-.2681	-.4107	-.2074	-.1747	-.1098
60.000				.9339	.0550	-.3880	-.3979	-.3908	-.1190	-.5452	-.6631	-.3568	-.1166	-.0678
90.000		1.0670		.6982	.2118	-.1963	-.2704	.0300	.4177	-.4877	-.4990	-.1644	-.0883	-.0622
120.000				.8051	.3163	-.1566	-.1857	-.1268	.3825	.4749	.0383	.2527	.1524	-.0678
150.000				.6230	.3328	-.0914	-.1708	-.1711	.3683	.4700	.5638	.0091	-.1182	-.1747
180.000		1.0650	1.1290	.7172	.2763	-.1281	-.2085	-.2806	.3320	.4854	.3907	-.0580	-.0949	-.2136
270.000			.6882		.2191	-.1772	-.2529	-.3094	.3164	.4698	.3388	-.1937	-.1637	-.2319

X/LT .7480 .6580 .9280

PHI	.000	-.0415	.0804	-.0856
30.000			-.0623 <td>.0610</td>	.0610
60.000			-.0212 <td>.0497</td>	.0497
90.000		.0307	-.0349	
120.000		.1161	-.0137	.3398
150.000		.1187	.1100	.3323
180.000		.0724	.1340	.1671
165.000		.0578	.1390	.4348
190.000		.0192	.1116	.1812

ALPHAT(1) = -0.580 BETAT(2) = -5.070

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5360
PHI	.000	1.1030	.7228	.3188	-.1481	-.4490	-.5062	-.4327	.0915	.0107	-.2148	-.3686	-.0976	-.0654
30.000				.3776	-.1030	-.4180	-.4799	-.5305	.0256	-.1986	-.3734	-.2066	-.1656	-.1149
60.000				.4846	-.0025	-.3411	-.4087	-.4326	-.0410	-.4769	-.6563	-.3324	-.1880	-.0132
90.000		1.0070		.6227	.1318	-.2376	-.3197	-.2118	.4935	-.4898	-.3280	-.1516	-.1037	-.1009
120.000				.7356	.2416	-.1463	-.2255	-.3066	.3824	.0849	.2127	.0621	-.0184	-.1141
150.000				.7864	.2859	-.1102	-.1881	-.3113	.3910	.4675	.2430	-.0794	-.1384	-.2249
180.000														



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

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ARC11-716 IAI4 OL+712+512+5+AT11 EXTERNAL TANK

(081730)

ALPHAT (1) = -0.900 BETAT (2) = -5.070

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
PMI														
165.000			.2746	-.1202	-.2018	-.3021	.2991	.3870	.4979	.3530	-.1431	-.1371	-.2740	-.2214
180.000	1.1030	1.1400	.7459	.2429	-.1491	-.2235	-.3184	.1936	.4937	.3485	-.2013	-.1913	-.2935	-.2299
270.000		.7086						.4088						

W/LT .7480 .8530 .9280

PMI

.000	-.0832	.0635	-.0965
30.000	-.0367	.0648	-.0423
60.000	-.0032	.0798	.0265
90.000	.0425	.0504	
120.000	.0856	-.0509	.2068
135.000	.0793	.0742	.2996
150.000	.0376	.0904	.1164
165.000	.0447	.1067	.3299
180.000	.0141	.0682	.1245

ALPHAT (1) = -0.500 BETAT (3) = .000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
PMI														
.000	1.1300	.7468	.3344	-.1443	-.4400	-.4937	-.3155	-.1125	.0379	.0436	-.1884	-.3934	-.0790	-.0489
30.000			.3487	-.1205	-.4317	-.4901	-.4668	-.0532	.0806	-.0842	-.3059	-.2490	-.1113	-.0781
60.000			.4034	-.0799	-.4046	-.4599	-.4461	.0144	.0430	-.4080	-.6335	-.2892	-.2469	-.0568
90.000		.8994	.4996	.0117	-.3335	-.4005	-.0321	.1317	.4238	-.4717	-.5611	-.1346	-.1137	-.1381
120.000			.6134	.1231	-.2469	-.3214	-.4043	.2424	.5099	.1741	.1927	-.0163	-.1092	-.1758
135.000								.2733		.3336		-.0512		-.2344
150.000			.7052	.2037	-.1833	-.2589	-.3034	.2885	.4071	.4366	.1191	-.2525	-.1821	-.3758
165.000			.2413	-.1515	-.2500	-.2672	.2937	.3903	.5039	.2871	-.2067	-.1299	-.2787	-.2468
180.000	1.1300	1.1440	.7357	.2491	-.1458	-.2197	-.3184	.1948	.4961	.3680	-.2035	-.0628	-.2473	-.2423
270.000		.8926						.4013						

W/LT .7480 .8530 .9280

PMI

.000	-.0112	.0561	-.1197
30.000	-.0219	.0535	-.0824
60.000	.0134	.0728	.0630
90.000	.0167	.0681	
120.000	.0321	.0130	.0938
135.000	.0076	.0987	.0517
150.000	-.0004	.1234	-.0157

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ARC11-716 IAL14 ON-TIE-SIGNEZ-AT111 EXTERNAL TANK (081730)

ALPHAT(1) = -0.940 BETAT(3) = .000

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .8330 .9200

PMI

.000 .0143 .0630 .1784  
 30.000 .0143 .0708 .0808  
 60.000

ALPHAT(1) = -0.970 BETAT(4) = 4.120

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3480 .3940 .4310 .5030 .5360

PMI

.000 1.1140 .7327 .3276 -.1381 -.4399 -.4995 -.2536 -.1274 .0091 .0823 -.1893 -.3789 -.0838 -.0417 -.0796  
 30.000 .3166 -.1616 -.4476 -.5044 -.4309 -.1010 .1166 -.0131 -.2923 -.3077 -.0844 -.0601 -.0610  
 60.000 .3320 -.1355 -.4368 -.4647 -.4218 .0193 .0869 -.2368 -.6170 -.2578 -.1823 -.1171 -.0777  
 90.000 .7969 .3947 -.0880 -.4048 -.4577 -.1054 .0720 .4469 -.4817 -.5664 -.1506 -.1245 -.1268  
 120.000 .4993 .0176 -.3256 -.3991 -.2305 .1151 .5145 .2449 .1014 -.0693 -.1309 -.2530 -.1916  
 150.000 .6150 .1239 -.2436 -.3178 -.4163 .1658 .3808 .4115 -.0176 -.3544 -.2683 -.4566 -.2492  
 180.000 1.1140 1.1370 .7440 .2022 -.1802 -.2590 -.3803 .1762 .3370 .4591 .2803 -.2934 -.1240 -.2348 -.2237  
 270.000 .9656 .2458 -.1446 -.2224 -.3093 .1709 .3594 .4677 .3541 -.2243 -.1130 -.2863 -.2350

K/LT .7400 .8330 .9200

PMI

.000 -.0342 .0589 -.1042  
 30.000 -.0313 .0802 -.1100  
 60.000 -.0037 .0819 .0526  
 90.000 -.0436 .0013  
 120.000 -.0439 -.0005 -.0111  
 150.000 -.0394 .0102 -.0565  
 180.000 -.0742 -.0393 -.1599  
 270.000 -.0406 .0231 .0608  
 180.000 -.0899 .0367 -.0741



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(R01730)

ARC11-716 1A14 Q1+712+312MS+AT11 EXTERNAL TANK

ALPHAT(1) = -8.000 BETAT(1) = 8.200

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0680	.6760	.2923	-.1677	-.4689	-.5236	-.1962	-.1441	.0327	.0096	-.2159	-.3078	-.1300	-.0689	-.0901
30.000			.2375	-.2023	-.4804	-.5334	-.1968	-.0839	.0961	-.0162	-.3024	-.3371	-.1129	-.0849	-.0674
60.000			.2564	-.2041	-.4803	-.4397	-.0870	-.0681	.0517	-.1911	-.6054	-.2903	-.1395	-.1113	-.1061
90.000			.2953	-.1646	-.4682	-.3687	-.1004	-.1861	.4649	-.4920	-.5667	-.1923	-.1383	-.1383	-.1084
120.000		.6822	.3904	-.0801	-.4085	-.4743	-.1853	.0119	.5227	.2693	.0782	-.1157	-.1855	-.2869	-.2517
150.000								.0389	.3011	.3011		-.2076		-.3487	
180.000			.3218	.0409	-.3175	-.3621	-.4889	.0540	.3337	.3186	-.1039	-.3061	-.3844	-.3095	-.2931
210.000			.1482	-.2256	-.3205	-.3582	.0550	.2784	.2784	.3826	.2219	-.4393	-.1493	-.2884	-.2981
240.000	1.0680	1.0310	.7167	.2209	-.1634	-.2404	-.2792	.1147	.2714	.4186	.3430	-.2387	-.1749	-.3087	-.3148
270.000		1.0990						.4034							

K/LT .7480 .6330 .9280

PMI

.000	-.0415	.0303	-.0918
30.000	-.0265	.0626	-.1009
60.000	-.0118	.0790	-.0351
90.000	-.1240	-.1390	
120.000	-.1009	-.0398	-.0278
150.000	-.1198	-.0021	-.0512
180.000	-.1395	-.0682	-.1098
210.000	-.1219	-.0135	.0914
240.000	-.1217	-.0230	-.0465

ALPHAT(2) = -4.450 BETAT(2) = -8.170

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1810	.7957	.4020	-.0828	-.4079	-.4663	-.4565	-.1734	.0615	-.0297	-.2454	-.2801	-.0846	-.0483	-.0816
30.000			.3013	.0112	-.3317	-.4071	-.4763	-.1394	.0226	-.2242	-.3580	-.1938	-.1475	-.1114	-.0727
60.000			.6236	.1266	-.2406	-.3129	-.3068	.1537	.0986	-.4694	-.5680	-.2793	-.1188	-.0399	-.0167
90.000		1.1130	.7256	.2285	-.1805	-.2370	-.2347	.3873	.9011	-.6087	-.6087	-.4904	-.1217	-.0522	-.0399
120.000			.7633	.2657	-.1313	-.2120	-.3084	.3162	.3920	-.1080	.1726	.1530	.0492	-.0569	-.0970
150.000								.2976	.1697	.3766	.3008	-.0365	-.1211	-.1933	-.1588
180.000			.7370	.2356	-.1566	-.2352	-.2651	.2833	.2833	.3766	.3402	-.0843	-.0982	-.2151	-.1908
210.000			.1770	-.2047	-.2794	-.3592	.0892	.2572	.4227	.4227	.3402	-.0843	-.0982	-.2151	-.1908
240.000	1.1810	1.0470	.6211	.1225	-.2429	-.3165	-.3962	.0560	.2546	.4274	.2992	-.2337	-.1681	-.3155	-.2234
270.000		.7463						.5690							

K/LT .7480 .6330 .9280

PMI



(001136)

ARC11-716 1A14 CE-T18-S12MS-AT11 EXTERNAL TANK

ALPHAT ( 8 ) = -4.430 BETAT ( 1 ) = -0.170

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7480 .6330 .9280

PHI  
 .0000 -.0763 .0333 -.0673  
 30.0000 -.0687 .0607 -.0371  
 60.0000 -.0007 .1368 .0434  
 90.0000 .0699 .1167  
 120.0000 .1236 .1172 .3764  
 150.0000 .1311 .2096 .3642  
 180.0000 .0933 .2091 .3179  
 210.0000 .0946 .2066 .4304  
 240.0000 .0360 .1624 .1640

ALPHAT ( 2 ) = -4.430 BETAT ( 2 ) = -4.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1760 .1940 .2190 .2420 .2900 .3440 .3940 .4310 .5050 .6360

PHI  
 .0000 1.116 .6414 .4301 -.0642 -.3869 -.4510 -.5176 -.0761 .0642 .0318 -.1934 -.3413 -.0304 -.0029 -.0310  
 30.0000 .4796 -.0215 -.3535 -.4252 -.4984 -.1175 .1146 -.1249 -.2909 -.2112 -.1115 -.0689 -.0629  
 60.0000 .5526 .0316 -.3033 -.3719 -.3719 .0846 .1489 -.4318 -.5687 -.2411 -.2077 -.0271 -.0175  
 90.0000 1.0370 .6289 .1277 -.2449 -.3176 -.3961 .3588 .2094 -.5946 -.5376 -.1310 -.0685 -.0742  
 120.0000 .6764 .1759 -.2705 -.2839 -.3556 .3120 .4216 -.0417 .1195 .0546 -.0233 -.1114 -.1640  
 150.0000 .6886 .1837 -.2702 -.2723 -.3093 .1314 .3404 .3963 .1904 -.1298 -.1433 -.2488 -.2259  
 180.0000 .1655 -.2102 -.2934 -.3690 .0892 .3153 .4449 .3008 .2036 -.1424 .2707 .2093  
 210.0000 1.1080 1.0640 .6443 .1392 -.2333 -.3072 -.3982 .0525 .3027 .4483 .3175 .2436 .1993 .1993  
 240.0000 .6497 .5695

K/LT .7480 .6330 .9280

PHI  
 .0000 -.0303 .0673 -.0946  
 30.0000 -.0473 .0776 -.0480  
 60.0000 -.0037 .1235 .0416  
 90.0000 .0427 .1490  
 120.0000 .0867 .0454 .3014  
 150.0000 .0801 .1477 .2941  
 180.0000 .0304 .1488 .2232  
 210.0000 .0627 .1630 .3082  
 240.0000 .0316 .1329 .1212



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+112+512N25+AT11 EXTERNAL TANK (R81730)

ALPHAT (2) = -4.430    BETAT (3) = .000															
DEPENDENT VARIABLE CP															
SECTION (1) EXTERNAL TANK															
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.8590	.4349	-.0497	-.3795	-.4446	-.5143	-.0694	.0930	.0737	-.1670	-.3367	-.0540	.0044	-.0189
30.000			.4433	-.0429	-.3715	-.4369	-.5094	-.0948	.1334	-.0303	-.2444	-.3033	-.0737	-.3244	-.0489
60.000			.4778	-.0217	-.3522	-.4193	-.3993	-.0715	.1948	-.3807	-.5328	-.1934	-.1461	-.0989	-.0446
90.000		.9477	.5284	.0225	-.3194	-.3881	-.4033	.3127	.5192		-.5936	-.5661	-.1277	-.0837	-.1110
120.000			.5843	.0863	-.2770	-.3485	-.4289	.0974	.4630	.0359	.0756	-.0226	-.0937	-.1594	-.2120
150.000								.1089		.2622		-.0672		-.1978	
180.000			.6303	.1273	-.2437	-.3147	-.4263	.1024	.3365	.3698	.0748	-.2489	-.1746	-.3307	-.2892
210.000				.1460	-.2295	-.3077	-.3977	.1115	.3237	.4302	.2401	-.2476	-.1190	-.2436	-.2273
240.000			.6540	.1491	-.2293	-.3026	-.3949	.0995	.3036	.4260	.3264	-.2516	-.0787	-.2439	-.2504
270.000									.5286						
K/LT	.7460	.8530	.9280												

ALPHAT (2) = -4.430 BETAT (4) = 4.090															
SECTION (1) EXTERNAL TANK															
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.8590	.4349	-.0497	-.3795	-.4446	-.5143	-.0894	.0930	.0737	-.1670	-.3367	-.0540	.0044	-.0188
30.000			.4433	-.0429	-.3715	-.4369	-.5094	-.0948	.1334	-.0303	-.2444	-.3033	-.0737	-.3244	-.0489
60.000			.4778	-.0217	-.3522	-.4193	-.3993	-.0715	.1948	-.3807	-.5328	-.1934	-.1461	-.0989	-.0446
90.000		.9477	.5284	.0225	-.3194	-.3881	-.4033	.3127	.5192		-.5936	-.5661	-.1277	-.0837	-.1110
120.000			.5843	.0863	-.2770	-.3485	-.4289	.0974	.4630	.0359	.0756	-.0226	-.0937	-.1594	-.2120
150.000								.1089		.2622		-.0672		-.1978	
180.000			.6303	.1273	-.2437	-.3147	-.4263	.1024	.3365	.3698	.0748	-.2489	-.1746	-.3307	-.2892
210.000				.1460	-.2295	-.3077	-.3977	.1115	.3237	.4302	.2401	-.2476	-.1190	-.2436	-.2273
240.000			.6540	.1491	-.2293	-.3026	-.3949	.0995	.3036	.4260	.3264	-.2516	-.0787	-.2439	-.2504
270.000									.5286						
K/LT	.7460	.8530	.9280												

SECTION (1) EXTERNAL TANK		DEPENDENT VARIABLE CP													
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.070	1.1680	.8370	.4242	-.0662	-.3831	-.4515	-.5232	-.1016	.1010	.0559	-.1939	-.3466	-.0456	-.0048	-.10364
30.000			.3997	-.0843	-.4046	-.4670	-.5330	-.0793	.1175	.0268	-.2604	-.2773	-.0366	-.0100	-.0408
60.000			.3973	-.0658	-.4038	-.4621	-.4172	-.1043	.2321	-.3077	-.5286	-.1641	-.0874	-.0924	-.0832
90.000		.8487	.4260	-.0625	-.3875	-.4440	-.0864	-.0134	.5479	-.5315	-.4777	-.4777	-.1462	-.1008	-.1119
120.000			.4825	-.0103	-.3490	-.4152	-.0139	.0475	.2510	.1385	.0530	-.0745	-.1227	-.2101	-.1762
135.000								.0423		.2707		-.1430		-.2720	
150.000			.5534	.0349	-.2998	-.3686	-.1943	.0259	.2754	.3444	-.0478	-.3734	-.2628	-.4266	-.2349
165.000				.1087	-.2604	-.3334	-.4298	.0861	.2746	.3972	.2211	-.3334	-.1193	-.2394	-.2028
180.000			.6457	.1420	-.2345	-.3075	-.4019	.0756	.2760	.4043	.3332	-.2697	-.0982	-.2837	-.2286
210.000	1.1680	1.0650							.4963						
240.000		1.0390													

ALPHAT (2) = -4.430 BETAT (4) = 4.090															
DEPENDENT VARIABLE CP															
SECTION (1) EXTERNAL TANK															
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.8590	.4349	-.0497	-.3795	-.4446	-.5143	-.0894	.0930	.0737	-.1670	-.3367	-.0540	.0044	-.0188
30.000			.4433	-.0429	-.3715	-.4369	-.5094	-.0948	.1334	-.0303	-.2444	-.3033	-.0737	-.3244	-.0489
60.000			.4778	-.0217	-.3522	-.4193	-.3993	-.0715	.1948	-.3807	-.5328	-.1934	-.1461	-.0989	-.0446
90.000		.9477	.5284	.0225	-.3194	-.3881	-.4033	.3127	.5192		-.5936	-.5661	-.1277	-.0837	-.1110
120.000			.5843	.0863	-.2770	-.3485	-.4289	.0974	.4630	.0359	.0756	-.0226	-.0937	-.1594	-.2120
150.000								.1089		.2622		-.0672		-.1978	
180.000			.6303	.1273	-.2437	-.3147	-.4263	.1024	.3365	.3698	.0748	-.2489	-.1746	-.3307	-.2892
210.000				.1460	-.2295	-.3077	-.3977	.1115	.3237	.4302	.2401	-.2476	-.1190	-.2436	-.2273
240.000			.6540	.1491	-.2293	-.3026	-.3949	.0995	.3036	.4260	.3264	-.2516	-.0787	-.2439	-.2504
270.000									.5286						
K/LT	.7460	.8530	.9280												

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 Q1+112+312N25+A111 EXTERNAL TANK (RB1739)

ALPHAT (2) = -4.430 BETAT (4) = 4.090

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI  
 .000 -.0356 .0800 -.0905  
 30.000 -.0319 .0761 -.0887  
 60.000 -.0289 .0662 .0407  
 90.000 -.0171 .0632 .0214  
 120.000 -.0171 .0339 .0214  
 135.000 -.0355 .0472 -.0295  
 150.000 -.0392 -.0006 -.1294  
 165.000 -.0382 .0637 .0927  
 180.000 -.0009 .0775 -.0571

ALPHAT (2) = -4.430 BETAT (5) = 8.160

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4310 .5090 .5580 .6380

PMI  
 .000 1.1140 .7830 .3690 -.0934 -.4127 -.4738 -.5493 -.1580 .0462 -.0301 -.2348 -.2721 -.0901 -.0807 -.0908  
 30.000 .3286 -.1377 -.4461 -.5067 -.5517 -.1394 .0957 .0143 -.2678 -.2544 -.0422 -.0343 -.0650  
 60.000 .3111 -.1670 -.4541 -.5033 -.2559 -.0861 .1385 -.2292 -.4004 -.1622 -.0702 -.0802 -.0861  
 90.000 .7424 .3260 .1384 -.4490 -.0988 -.0483 -.0536 .3437 -.5161 -.3479 -.1656 -.1269 -.1408  
 120.000 .3791 -.1010 -.4207 -.2461 -.0355 -.0397 .2129 .1518 .0490 -.1411 -.1910 -.2395 -.2137  
 135.000 .4663 -.0255 -.3630 -.4293 -.2191 -.0266 .2307 .2918 -.0734 -.5197 -.3807 -.4796 -.2593  
 150.000 .0542 -.3014 -.3755 -.4692 .0297 .2030 .3402 .1792 -.9252 -.1672 -.2722 -.2664  
 165.000 1.1140 .9532 .6159 .1138 -.2536 -.3309 -.4209 .3488 .3080 -.2687 -.1558 -.3653 -.2953  
 180.000 1.1140 .9280 .4866

X/LT .7460 .8530 .9280

PMI  
 .000 -.0821 .0461 -.0928  
 30.000 -.0474 .0732 -.0964  
 60.000 -.0379 .0779 -.0019  
 90.000 -.0666 -.0043  
 120.000 -.0364 .0015 .0035  
 135.000 -.0789 .0409 -.0260  
 150.000 -.0849 -.0237 -.1342  
 165.000 -.0791 .0278 .1343  
 180.000 -.0867 .0234 -.0689



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1738)

ALPHAT (3) = -.540 BETAT (1) = -6.170

SECTION ( 1 )EXTERNAL TANK		DEPENDENT VARIABLE CP													
X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI															
.000	1.1400	.0880	.4944	.0024	-.3448	-.4121	-.4847	-.3886	.0824	-.0115	-.2184	-.2175	-.1202	-.0582	-.0685
30.000			.6018	.1028	-.2605	-.3359	-.4229	-.1071	.0915	-.1502	-.2981	-.1349	-.1314	-.0959	-.0491
60.000			.6965	.1923	-.1886	-.2667	-.2689	.1969	.2169	-.3614	-.3819	-.1710	-.1472	.0074	.0191
90.000	1.1310		.7410	.2381	-.1545	-.2359	-.2239	.4077	.5302	-.5752	-.4699	-.1514	-.0750	-.0089	
120.000			.7111	.2105	-.1757	-.2551	-.3394	.2227	.2859	-.2522	-.0673	.1885	.1022	-.0193	-.0419
135.000								.1273	.0078			.0880		-.0344	
150.000			.6476	.1483	-.2269	-.3042	-.3912	.0346	.1834	.2763	.2235	-.0732	-.0896	-.1619	-.1090
165.000				.0800	-.2822	-.3544	-.4190	-.2283	.1735	.3466	.2806	-.0968	-.0756	-.1929	-.1219
180.000	1.1400	.9636	.5258	.0780	-.3153	-.3865	-.4311	-.0703	.1826	.3654	.2519	-.2593	-.1325	-.2849	-.1482
270.000		.7610							.6718						
X/LT	.7460	.8530	.9280												

PHI																
.000	-.0806	.0566	-.0928													
30.000	-.0451	.0820	-.0634													
60.000	.0236	.1678	.0552													
90.000	.0874	.1443														
120.000	.1322	.1984	.4303													
135.000	.1873	.2748	.4151													
150.000	.1341	.2568	.3624													
165.000	.1378	.2556	.4363													
180.000	.1005	.2042	.1914													
X/LT	.7460	.8530	.9280													

ALPHAT (3) = -.530 BETAT (2) = -4.090

SECTION ( 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PHI																
.000	1.1890	.9365	.5257	.0161	-.3231	-.3916	-.4726	-.3517	.1378	.0644	-.1702	-.2805	-.0832	.0097	-.0056	
30.000			.5739	.0679	-.2887	-.3608	-.4421	-.2380	.1830	-.0493	-.2383	-.1854	-.0995	-.0355	-.0358	
60.000			.6189	.1122	-.2545	-.3269	-.3406	.0390	.2617	-.3123	-.4266	-.1402	-.1280	-.0818	-.0019	
90.000	1.0950		.6431	.1382	-.2362	-.3117	-.3123	.3682	.5425	-.5755	-.5410	-.1753	-.0956	-.0361		
120.000			.6316	.1301	-.2442	-.3181	-.3953	.1551	.3350	-.1824	-.0875	.0613	.0280	-.0742	-.1079	
135.000								-.0483	.1020			-.0354		-.0877		
150.000			.6058	.1031	-.2654	-.3370	-.4186	-.1082	.2582	.3149	.0904	-.1183	-.0939	-.1990	-.1692	
165.000				.0711	-.2874	-.3575	-.4501	-.0244	.2329	.3762	.2403	-.1960	-.0976	-.2102	-.1337	
180.000	1.1890	.9805	.5496	.0433	-.3039	-.3753	-.4591	-.0223	.1987	.3694	.2701	-.2694	-.0897	-.1885	-.1553	
270.000		.8717							.5986							
X/LT	.7460	.8530	.9280													

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ARC11-716 1A14 CR+712+S12N2S+AT11 EXTERNAL TANK (R81736)

ALPHAT ( 3 ) = -.330 BETAT ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

.000	-.0399	.0764	-.0748
30.000	-.0336	.0955	-.0467
60.000	.0144	.1306	.0337
90.000	.0654	.1652	
120.000	.1125	.1542	.3345
135.000	.1151	.2263	.3348
150.000	.0989	.2153	.2750
165.000	.1077	.2238	.3202
180.000	.0916	.1883	.1392

ALPHAT ( 3 ) = -.320 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.1990	.9479	.5310	.0203	-.3199	-.3639	-.4653	-.3841	.1435	.0878	-.1496	-.2862	-.0690	.0202	-.0012
30.000			.5315	.0208	-.3212	-.3900	-.4643	-.1552	.1492	.0285	-.2161	-.2910	-.0666	.0035	-.0122
60.000			.5330	.0240	-.3184	-.3831	-.4576	-.0088	.2923	-.2614	-.4182	-.1516	-.0631	-.0539	-.0498
90.000		.9607	.5392	.0372	-.3150	-.3315	-.3673	.2192	.5984		-.6060	-.3466	-.1673	-.1061	-.0632
120.000			.5442	.0429	-.3108	-.3776	-.3988	.0519	.3663	-.1059	-.1174	-.0307	-.0513	-.1195	-.1567
135.000								.0304		.1578		-.1107		-.1523	
150.000			.5538	.0476	-.3059	-.3683	-.4744	.0179	.2678	.3333	-.0388	-.2524	-.1317	-.2575	-.2311
165.000				.0471	-.2994	-.3695	-.4605	.0229	.2273	.3587	.1943	-.2902	-.0964	-.1983	-.1712
180.000	1.1990	.9773	.5551	.0497	-.3026	-.3686	-.4592	-.0177	.2184	.3524	.2765	-.3150	-.0565	-.1820	-.1622
270.000		.9648							.5639						

X/LT .7460 .8330 .9280

PHI

.000	-.0232	.0888	-.0684
30.000	-.0226	.0933	-.0595
60.000	-.0085	.1297	.0121
90.000	.0484	.1389	
120.000	.0821	.1003	.1997
135.000	.0687	.1491	.1503
150.000	.0497	.1337	.0851
165.000	.0724	.1516	.1415
180.000	.0747	.1535	.0241



TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1730)

ALPHAT( 3 ) = -.520 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP													
X/LT		.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1820	.9267	.5147	.0153	-.3272	-.3959	-.4753	-.4126	.1393	.0663	-.1703	-.2874	-.0919	.0118	-.0094
30.000			.4667	-.0288	-.3601	-.4277	-.4838	-.2833	.1992	.0906	-.2221	-.3239	-.0358	.0118	-.0180
60.000			.4378	-.0551	-.3780	-.4370	-.5271	-.0414	.5998	-.2010	-.3878	-.1719	-.0582	-.0110	-.0388
90.000		.8607	.4340	-.0904	-.3863	-.4308	-.3837	.0745	.5780		-.5897	-.1798	-.0806	-.0894	-.0815
120.000			.4488	-.0420	-.3746	-.4344	-.4165	-.0302	.3801	-.0365	-.1119	-.0715	-.0880	-.1679	-.1393
135.000								-.0294	.2021			-.1594		-.2098	
150.000			.4890	-.0186	-.3521	-.4142	-.2150	-.0131	.1445	.2756	-.0990	-.4044	-.2216	-.3493	-.2006
165.000			.0140	-.3277	-.3987	-.4819	-.0084		.1780	.3127	.1749	.3064	-.0370	-.1983	-.1526
180.000	1.1820	.9767	.5484	.0403	-.3117	-.3798	-.4698	.0068	.1866	.3302	.2918	-.3191	-.0734	-.2433	-.1698
270.000		1.0580							.5362						

X/LT .7480 .6530 .9280

PHI															
.000	-.0478	.0750	-.0757												
30.000	-.0349	.0908	-.0883												
60.000	-.0225	.1005	.0175												
90.000	.0097	.1110													
120.000	.0290	.0772	.0304												
135.000	.1146	.0887	.0000												
150.000	-.0005	.0440	-.0996												
165.000	.0304	.0998	.1286												
180.000	.0443	.1165	-.0236												

ALPHAT( 3 ) = -.530 BETAT ( 5 ) = 8.180

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI																
.000	1.1320	.8770	.4866	-.0081	-.3439	-.4163	-.4979	-.3472	.0804	-.0104	-.2136	-.2254	-.1733	-.0355	-.0681	
30.000			.3947	-.0891	-.4124	-.4735	-.5351	-.0908	.0913	.0405	-.2250	-.3131	-.0427	.0016	-.0401	
60.000			.3507	-.1308	-.4347	-.4914	-.4602	-.0478	.2547	-.1560	-.3923	-.1580	-.0276	-.0230	-.0637	
90.000		.7578	.3338	-.1442	-.4406	-.5010	-.3834	.0709	.5931		-.5862	-.3664	-.1251	-.0950	-.1208	
120.000			.3535	-.1153	-.4306	-.4922	-.1029	-.0852	.1138	.0478	-.1598	-.1356	-.1497	-.2191	-.1735	
135.000								-.0487	.0956			-.2333		-.2551		
150.000			.4078	-.0859	-.4029	-.4645	-.3489	-.0312	.1115	.2587	-.0925	-.5086	-.2847	-.4115	-.2129	
165.000				-.0316	-.3643	-.4306	-.1291	-.0314	.1418	.2574	.1331	-.5408	-.1428	-.2943	-.2103	
180.000	1.1320	.8609	.5195	.0201	-.3224	-.3967	-.4767	.0186	.1269	.2665	.2522	-.3112	-.1796	-.3139	-.2508	
270.000		1.1370							.5242							

X/LT .7480 .6530 .9280

PHI

TABULATED PRESSURE DATA - 1A14A - VOL. 9

DATE 06 JAN 79

(R01730)

ARC11-716 1A14 CR+T12+SI2N29+AT11 EXTERNAL TANK

ALPHAT( 3) = -.930 BETAT ( 5) = 8.180

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.7400	.8530	.9280
PMI			
.000	-.0831	.0546	-.0973
30.000	-.0488	.0814	-.0850
60.000	-.0417	.0955	.0305
90.000	-.0231	.0825	
120.000	-.0131	.0580	.0609
135.000	-.0282	.0835	.0279
150.000	-.0400	.0248	-.1102
165.000	-.0327	.0564	.1805
180.000	-.0416	.0592	-.0572

ALPHAT( 4) = 3.950 BETAT ( 1) = -8.200

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1230	.9763	.5965	.1049	-.2639	-.3401	-.4255	-.3509	.0985	.0095	-.1533	-.1900	-.1390	-.0263	-.0367
30.000			.7098	.2099	-.1787	-.2590	-.3504	-.0088	.1424	-.0748	-.1396	-.1129	-.0804	-.0311	-.0140
60.000			.7643	.2618	-.1360	-.2145	-.2493	.2808	.3202	-.2468	-.2336	-.0981	-.0060	-.0212	.0168
90.000		1.1190	.7354	.2360	-.1593	-.2389	-.2220	.3913	.4912		-.4134	-.3668	-.3629	-.2162	-.0443
120.000			.6338	.1391	-.2375	-.3137	-.3732	.1170	.1241	-.4146	-.5203	-.1821	.2095	.0896	.0285
135.000							-.0222			-.2014		-.1554	.0550		
150.000			.5319	.0401	-.3147	-.3846	-.4738	-.0784	.0566	.2004	.0839	-.2059	.0547	-.0909	-.0483
165.000				-.0348	-.3699	-.4387	-.4438	-.2212	.0926	.2904	.1817	-.1745	-.0005	-.1189	-.0536
180.000	1.1230	.8536	.4100	-.0770	-.3999	-.4613	-.4491	-.1441	.1319	.3027	.1867	-.3122	-.0966	-.1380	-.0862
270.000		.7403													

X/LT	.7400	.8530	.9280
PMI			
.000	-.0837	.0530	-.1132
30.000	-.0068	.1059	-.0714
60.000	.0552	.1958	.0462
90.000	.0642	.0705	
120.000	.2037	.2726	.4944
135.000	.2121	.3421	.4730
150.000	.1830	.3008	.4232
165.000	.1669	.3017	.4498
180.000	.1490	.2421	.2024



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PAGE 4807

ARC11-716 1A14 Q1+T12+S12N25+AT11 EXTERNAL TANK (RB1736)

ALPHAT(4) = 3.960 BETAT(2) = -4.110

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.0000	1.1750	1.0360	.6376	.1291	-.2442	-.3159	-.4062	-.3526	.2018	.1012	-.1097	-.2130	-.1331	.0030	.0248
30.0000			.6769	.1693	-.2100	-.2885	-.3757	-.2885	.2225	.0266	-.1343	-.1937	-.0982	-.0036	.0238
60.0000			.6777	.1701	-.2087	-.2807	-.3691	.1302	.3545	-.1913	-.2435	-.1717	-.0263	.0116	.0277
90.0000		1.0360	.6319	.1304	-.2436	-.3177	-.3822	.3367	.3037	-.4976	-.2342	-.0127	-.0442	-.0384	
120.0000			.5566	.0816	-.2993	-.3677	-.4343	.0753	.1903	-.3262	-.4296	-.2070	.0855	-.0193	-.0480
135.0000								-.1194		-.0131		-.3203		-.0106	
150.0000			.4999	.0013	-.3413	-.4086	-.4551	-.1961	.1472	.2450	.0953	-.3224	-.0067	-.1233	-.0907
165.0000				-.0378	-.3728	-.4352	-.5063	-.0863	.1367	.2990	.1923	-.2199	-.0447	-.1251	-.0690
180.0000		1.1750	.4332	-.0626	-.3837	-.4495	-.3216	-.0873	.0951	.2802	.2321	-.3314	-.0712	-.1101	-.0875
270.0000		.6330							.5825						

X/LT .7460 .6530 .9280

PHI

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
.0000	1.1920	1.0320	.6462	.1380	-.2336	-.3085	-.3964	-.3435	.2184	.1226	-.0998	-.1986	-.1168	.0116	.0286
30.0000			.6270	.1203	-.2488	-.3235	-.4072	-.3202	.2393	.0818	-.1634	-.2055	-.0996	.0009	.0215
60.0000			.5861	.0792	-.2788	-.3473	-.4471	.0389	.3682	-.1286	-.2341	-.1588	-.0610	-.0153	.0024
90.0000		.9501	.5317	.0318	-.3163	-.3863	-.4240	.1975	.5295	-.5754	-.2235	-.0764	-.0829	-.0598	
120.0000			.4830	-.0124	-.3455	-.4145	-.4240	-.0536	.2419	-.2690	-.3613	-.1485	.0205	-.0516	-.0847
135.0000								-.0722		.0526		-.2948		-.0721	
150.0000			.4598	-.0350	-.3659	-.4274	-.4990	-.0518	.1774	.2572	-.0288	-.3497	-.0379	-.1589	-.1441
165.0000				-.0437	-.3713	-.4375	-.5147	-.0405	.1218	.2978	.1868	-.2752	-.0587	-.1116	-.0875
180.0000		1.1920	.4455	-.0447	-.3765	-.4458	-.5137	-.0308	.1301	.2887	.2524	-.3967	-.0597	-.0955	-.0763
270.0000		.9542							.5271						

ALPHAT(4) = 3.960 BETAT(3) = .000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.0000	1.1920	1.0320	.6462	.1380	-.2336	-.3085	-.3964	-.3435	.2184	.1226	-.0998	-.1986	-.1168	.0116	.0286
30.0000			.6270	.1203	-.2488	-.3235	-.4072	-.3202	.2393	.0818	-.1634	-.2055	-.0996	.0009	.0215
60.0000			.5861	.0792	-.2788	-.3473	-.4471	.0389	.3682	-.1286	-.2341	-.1588	-.0610	-.0153	.0024
90.0000		.9501	.5317	.0318	-.3163	-.3863	-.4240	.1975	.5295	-.5754	-.2235	-.0764	-.0829	-.0598	
120.0000			.4830	-.0124	-.3455	-.4145	-.4240	-.0536	.2419	-.2690	-.3613	-.1485	.0205	-.0516	-.0847
135.0000								-.0722		.0526		-.2948		-.0721	
150.0000			.4598	-.0350	-.3659	-.4274	-.4990	-.0518	.1774	.2572	-.0288	-.3497	-.0379	-.1589	-.1441
165.0000				-.0437	-.3713	-.4375	-.5147	-.0405	.1218	.2978	.1868	-.2752	-.0587	-.1116	-.0875
180.0000		1.1920	.4455	-.0447	-.3765	-.4458	-.5137	-.0308	.1301	.2887	.2524	-.3967	-.0597	-.0955	-.0763
270.0000		.9542							.5271						

X/LT .7460 .6530 .9280

PHI

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DATE 06 JAN 79 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01730)

ARC11-716 1A14 CR+T12+S12N23+AT11 EXTERNAL TANK

ALPHAT ( 4 ) = 3.900 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
.000 .0111 .1139 -.0114  
30.000 .0095 .1236 -.0155  
60.000 .0173 .1436 .0609  
90.000 .0376 .1543  
120.000 .1179 .1673 .2104  
135.000 .1103 .1942 .1739  
150.000 .0943 .1766 .1172  
165.000 .1170 .1895 .1373  
180.000 .1183 .1895 .0170

ALPHAT ( 4 ) = 3.950 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0060 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380  
PHI  
.000 1.1720 1.0250 .6226 .1255 -.2448 -.3159 -.4036 -.3557 .1914 .0976 -.1066 -.2166 -.1472 .0034 .0227  
30.000 .5908 .0535 -.3047 -.3724 -.4500 -.3709 .2786 .0976 -.1936 -.2116 -.2116 -.1198 .0070 .0128  
60.000 .4813 -.0199 .3527 .4157 .5032 .0320 .3992 -.0790 .2679 .1279 .0734 .0273 -.0165  
90.000 .8506 .4309 -.0586 .3852 .4467 .2283 .5705 .5705 .5935 .1901 .1322 .0817 .0457  
120.000 .4025 -.0756 -.4038 .4601 .4359 .0285 .2509 .2509 .3106 .0909 .0579 .1056 .0790  
135.000 .4064 .0733 .4033 .4570 .3247 .0924 .1264 .1264 .1104 .0927 .0927 .1628 .2389 .1336  
150.000 .0679 .3904 .4526 .4403 .0696 .1222 .1222 .2775 .1306 .4072 .0782 .1167 .0842  
165.000 1.1720 .8714 .4369 .0578 .3939 .4451 .5195 .1295 .2780 .2477 .3834 .0642 .1330 .0979  
180.000 1.0450  
270.000

X/LT .7460 .8530 .9280

PHI  
.000 -.0141 .1007 -.0116  
30.000 -.0172 .1103 .0230  
60.000 .0167 .1168 .0224  
90.000 .0449 .1341  
120.000 .0736 .1231 .0633  
135.000 .0629 .1286 .0216  
150.000 .0537 .0795 .0770  
165.000 .0774 .1389 .1571  
180.000 .0947 .1498 .0110



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 CR+T12+312425+AT11 EXTERNAL TANK (RB1736)

ALPHAT (4) = 5.980 BETAT (5) = 8.230

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PMI															
.000	1.1200	.9767	.9973	.1055	-.2616	-.3372	-.4243	-.3600	.0884	.0048	-.1385	-.2080	-.1716	-.0283	-.0290
30.000			.4888	-.0199	-.3575	-.4267	-.5025	-.1082	.1497	.0846	-.1814	-.2180	-.1062	.0114	-.0210
60.000			.3738	-.1035	-.4251	-.4594	-.4293	-.0938	.2525	-.0463	-.2730	-.1347	-.3882	-.0194	-.0465
90.000		.7434	.3266	-.1352	-.4434	-.4999	-.2430	-.0299	.5556		.4181	-.1097	-.1315	-.0879	-.0719
120.000			.3141	-.1566	-.4512	-.5068	-.1893	-.0880	.1995	-.1109	-.2872	-.1178	-.1178	-.1539	-.1138
135.000						-.1125				.1247	-.2800			-.1724	
150.000			.3385	-.1341	-.4421	-.4965	-.1435	-.0966	.0359	.1889	-.1163	-.4907	-.2171	-.2981	-.1808
165.000				-.1106	-.4256	-.4844	-.1291	-.0908	.0776	.2054	.0939	-.5479	-.1267	-.1761	-.1481
180.000	1.1200	.7531	.4140	-.0771	-.4032	-.4630	-.3301	-.0644	.0690	.2057	.1898	-.3652	-.1363	-.2278	-.1886
270.000		1.1230							.9016						

K/LT .7480 .6530 .9280

PMI

.000	-.0644	.0538	-.0030
30.000	-.0512	.0905	-.0800
60.000	-.0386	.1092	.0079
90.000	.0130	.1254	
120.000	.0377	.1136	.0949
135.000	.0226	.1173	.0472
150.000	.0072	.0611	-.0946
165.000	.0199	.0925	.2187
180.000	.0046	.0894	-.0422

ALPHAT (5) = 7.930 BETAT (1) = -8.180

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5980	.6380
PMI															
.000	1.0830	1.0370	.6864	.2017	-.1837	-.2623	-.3527	-.2779	.1085	.0324	-.0964	-.1159	-.1154	-.0778	.0013
30.000			.8064	.3068	-.0977	-.1799	-.2750	.1651	.2021	.0001	-.0687	-.0690	-.0353	-.0006	.0495
60.000			.8098	.3117	-.0910	-.1691	-.2835	.3106	.3961	-.1433	-.1500	-.0706	.0189	.0342	.0709
90.000		1.0740	.7581	.2153	-.1758	-.2530	-.2330	.3491	.4094		-.3595	-.2177	-.0106	.0453	.0448
120.000			.5480	.0643	-.2983	-.3716	-.3809	-.0061	-.0847	-.2017	-.3763	-.2430	.0701	.1264	.0808
135.000								-.1201		.0194		-.2813		.1039	
150.000			.4267	-.0539	-.3687	-.4365	-.5236	-.1893	-.1026	.2194	-.0269	-.2665	.0156	-.0165	.0020
165.000				-.1169	-.4376	-.5026	-.4984	-.3244	.0573	.2719	.587	-.1916	-.0126	-.0449	.0078
180.000	1.0830	.7567	.3164	-.1513	-.4617	-.5166	-.5023	-.2308	.1263	.2999	.1804	-.3356	-.0868	-.0663	-.0194
270.000		.6977							.4283						

K/LT .7480 .6530 .9280

PMI

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81739)

ARC11-716 1A14 OL+T12+S12N23+X111 EXTERNAL TANK

ALPHAT( 3) = 7.950 BETAT ( 1) = -0.100

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8330 .9280

PHI  
 .000 -.0236 .0750 -.0334  
 30.000 .0907 .1424 .0096  
 60.000 .1002 .2114 .0612  
 90.000 .1347 .2080  
 120.000 .2034 .2807 .3676  
 135.000 .2274 .3311 .4356  
 150.000 .1939 .2961 .3757  
 165.000 .2032 .2886 .4344  
 180.000 .1670 .2394 .1674

ALPHAT( 3) = 8.000 BETAT ( 2) = -4.060

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PHI  
 .000 1.1280 1.1150 .7371 .2331 -.1993 -.2384 -.3336 -.2774 .2217 .1339 -.0550 -.1069 -.0844 -.0349 .0460  
 30.000 .7660 .2620 -.1357 -.2182 -.3107 -.2099 .2670 .0884 -.1074 -.0612 -.0444 -.0114 .0302  
 60.000 .7144 .2138 -.1725 -.2485 -.3585 .1916 .4166 -.0875 -.1416 -.0334 -.0174 -.0043 .0298  
 90.000 .9848 .6036 .1130 -.2594 -.3341 -.3351 .3487 .4104 -.4446 -.1806 -.0444 -.0381 -.0081  
 120.000 .4775 -.0370 -.3527 -.4214 -.4637 .0218 .0302 -.1991 -.4514 -.2613 .0448 .0583 .0132  
 135.000 .3934 -.0848 -.4131 -.4706 -.4593 -.2105 .0638 .2275 .0029 .3572 -.0349 -.0662 -.0448  
 150.000 -.1209 -.4370 -.4947 -.4532 -.1693 .1035 .2729 .1420 .2428 -.0502 -.0525 -.0104  
 165.000 1.1280 .7602 .3317 .1424 .4427 .5017 .1936 .1266 .0701 .2630 .4130 .0716 .0504 .0279  
 180.000 .6032 .4455

X/LT .7400 .8330 .9280

PHI  
 .000 .0202 .1285 .0155  
 30.000 .0432 .1527 .0123  
 60.000 .0592 .1664 .0530  
 90.000 .1036 .1967  
 120.000 .1713 .2702 .3638  
 135.000 .1789 .3065 .3555  
 150.000 .1621 .2784 .3111  
 165.000 .1778 .2736 .3466  
 180.000 .1543 .2355 .1420



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 08+112+512N3+AT11 EXTERNAL TANK

(881738)

ALPHAT ( 3 ) = 8.020 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6390
PHI															
.000	1.1480	1.1290	.7448	.2366	-.1511	-.2334	-.3292	-.2720	.2628	.1592	-.0418	-.1098	-.0421	.0090	.0488
30.000			.7062	.2029	-.1842	-.2632	-.3543	-.2975	.2904	.1325	-.1098	-.1000	-.0484	.0088	.0464
60.000			.6118	.1130	-.2539	-.3274	-.4301	.0472	.4318	-.0374	-.1393	-.0456	-.0801	.0037	.0148
90.000		.8994	.5010	.0107	-.3375	-.4077	-.4220	.1964	.4284		-.4266	-.0663	-.0361	-.0731	-.0813
120.000			.4079	-.0744	-.4030	-.4634	-.4880	-.0582	.1004	-.1721	-.4832	-.1970	-.0051	-.0105	-.0146
150.000								-.1136		.0456		-.3148		-.0309	
180.000								-.1125	.1000	.2443	-.0590	-.3685	-.0732	-.1153	-.0736
210.000								-.1115	.0691	.2795	.1590	-.2517	-.0379	-.0589	-.0161
240.000	1.1480	.7612	.3401	-.1423	-.4380	-.4965	-.2405	-.1107	.0676	.2777	.2318	-.4805	-.0853	-.0476	-.0057
270.000		.9065						.4312							

X/LT .7480 .8330 .9280

PHI

.000	.0307	.1371	.0344
30.000	.0300	.1494	.0048
60.000	.0229	.1489	.0168
90.000	.0753	.1206	
120.000	.1373	.2080	.1890
150.000	.1216	.2166	.1621
180.000	.1146	.1932	.1068
210.000	.1394	.2154	.1804
240.000	.1415	.2123	.0263

ALPHAT ( 3 ) = 8.000 BETAT ( 4 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6390
PHI															
.000	1.1300	1.1080	.7274	.2279	-.1610	-.2421	-.3368	-.2797	.2225	.1308	-.0561	-.1052	-.0947	-.0439	.0472
30.000			.6274	.1317	-.2415	-.3195	-.4041	-.3301	.2937	.1287	-.1171	-.1642	-.1283	-.0347	.0388
60.000			.5034	.0151	-.3329	-.4015	-.4850	-.1164	.4455	.0064	-.1723	-.1492	-.0707	.0147	.0348
90.000		.8040	.4008	-.0810	-.4098	-.4682	-.4572	.0896	.4421		-.4357	-.1574	-.0084	-.0800	-.0227
120.000			.3368	-.1274	-.4409	-.4752	-.4267	-.1070	.1531	-.0840	-.4074	-.1949	-.0329	-.0364	-.0344
150.000								-.0873		.1133		-.3414		-.0385	
180.000								-.1430	.1381	.2578	-.0696	-.4282	-.1376	-.1480	-.0886
210.000								-.1338	.1109	.2627	.1383	-.3700	-.0874	-.0332	-.0267
240.000	1.1300	.7639	.3366	-.1367	-.4424	-.4996	-.3947	-.1086	.1099	.2483	.2305	-.4403	-.0786	-.0659	-.0391
270.000		.9020						.4264							

X/LT .7480 .8330 .9280

PHI

(R81736)

ARC11-716 IAI14 4712-3124-AT11 EXTERNAL TANK

ALPHAT ( 5 ) = 0.000 BETAT ( 4 ) = 4.130

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .8530 .9280

PMI			
.000	.0187	.1278	.0148
30.000	-.0028	.1304	.0139
60.000	.0196	.1331	.0703
90.000	.0875	.1479	
120.000	.1082	.1448	.0811
135.000	.0973	.1337	.0313
150.000	.0842	.1090	-.0548
165.000	.1098	.1584	.1616
180.000	.1184	.1653	-.0125

ALPHAT ( 5 ) = 7.060 BETAT ( 5 ) = 8.300

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PMI															
.000	1.0790	1.0580	.6986	.2102	-.1769	-.2543	-.3515	-.2373	.1005	.0373	-.0764	-.1384	-.1328	-.0933	.0087
30.000			.9328	.0531	-.3066	-.3809	-.4592	-.4063	.1744	.1092	-.1225	-.1880	-.1838	-.0970	-.0133
60.000			.3654	-.0913	-.4138	-.4701	-.4528	-.1233	.3292	.0436	-.1688	-.1781	-.1280	.0068	.0108
90.000		.6837	.2961	-.1622	-.4623	-.4417	-.3485	-.0705	.4630		-.4624	-.1484	-.0475	-.0442	-.0920
120.000			.2603	-.1964	-.4701	-.4684	-.3260	-.0836	.1349	-.0669	-.3858	-.1345	-.0396	-.0886	-.0688
135.000								-.1280		.1100		-.2778		-.1023	
150.000			.2683	-.1959	-.4778	-.5242	-.1822	-.1340	.0704	.2039	-.1001	-.4296	-.1532	-.1813	-.0996
165.000				-.1623	-.4693	-.5286	-.1690	-.1419	.0583	.1983	.0692	-.4839	-.1023	-.1135	-.0894
180.000	1.0790	.6415	.3146	-.1627	-.4623	-.5193	-.1992	-.1165	.0589	.1673	.1543	-.3922	-.1144	-.1429	-.0536
270.000		1.0820							.4255						

K/LT .7400 .8530 .9280

PMI			
.000	-.0283	.0848	-.0200
30.000	-.0318	.0983	-.0161
60.000	-.0049	.1316	.0774
90.000	.0194	.1591	
120.000	.0790	.1443	.0769
135.000	.0710	.1471	.0469
150.000	.0425	.0932	-.0633
165.000	.0854	.1876	.2151
180.000	.0513	.1130	-.0211



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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 ON T12-S12N25-AT11 EXTERNAL TANK (RB1736) (14 FEB 74)

## REFERENCE DATA

SREF = 2.4210 36. FT. XMRP = 29.5000 INCHES  
 LRFP = 30.7590 INCHES YMRP = .0000 INCHES  
 BRFP = 30.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHAT(1) = -0.670 BETAT(1) = -0.150

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000	.5500				
PHI	.0000	1.1280	.7530	.3661	-.0703	-.3623	-.4200	-.4592	-.3276	.0516	.0802	-.1433	-.2637	-.0991	-.0317	-.0186
30.000	.4537	-.0030	-.3106	-.3748	-.4405	-.3508	-.1297	-.2037	-.3958	-.1836	-.1483	-.1203	-.0440	-.0049	-.0049	-.0049
60.000	.5975	.1286	-.2036	-.2757	-.3650	-.0039	-.0165	-.4959	-.5940	-.3887	-.1213	.0540	-.0049	-.0049	-.0049	-.0049
90.000	.7570	.2819	-.0848	-.1627	-.2506	.4011	.4942	-.3537	-.1971	-.0677	-.0094	-.0094	-.0094	-.0094	-.0094	-.0094
120.000	.8623	.5827	-.0043	-.0830	-.1772	.1556	.5211	.1007	.3441	.2458	.1308	.0322	-.0587	-.0587	-.0587	-.0587
150.000	.8814	.5965	.0068	-.0719	-.1837	-.0919	.4023	.5174	.4145	.1159	-.0049	-.0885	-.1832	-.1832	-.1832	-.1832
180.000	.8532	-.0266	-.1040	-.2012	-.1512	.3528	.5358	.4576	.0780	.0216	-.0937	-.1694	-.1694	-.1694	-.1694	-.1694
210.000	.7901	.2994	-.0681	-.1442	-.2252	-.1852	.3051	.5250	.4121	-.0316	-.0396	-.1687	-.1687	-.1687	-.1687	-.1687
240.000	.7509															

M/LT .7480 .8530 .9200

M/LT	.0000	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000	.5500
PHI	.0000	-.0489	.0201	-.0282								
30.000	-.0743	-.0007	.0216									
60.000	-.0832	.0261	.0751									
90.000	.0060	-.0224										
120.000	-.0015	.0094	.3857									
150.000	-.0429	.1400	.5921									
180.000	.0239	.1599	.2055									
210.000	.0343	.1545	.4919									
240.000	.0109	.1336	.2518									

ALPHAT(1) = -0.840 BETAT(2) = -4.070

## SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0500	.1000	.1500	.2000	.2500	.3000	.3500	.4000	.4500	.5000	.5500				
PHI	.0000	1.1710	.7930	.3939	-.0938	-.3503	-.4273	-.4440	-.3645	.0591	.0778	-.1169	-.3019	-.0498	.0070	.0207
30.000	.4896	-.0353	-.3222	-.3776	-.4388	-.3795	.0628	-.1225	-.3042	-.2005	-.1381	-.0447	-.0214	-.0214	-.0214	-.0214
60.000	.5336	.0452	-.2633	-.3478	-.4100	-.0466	-.0110	-.4894	-.5653	-.5170	-.1753	.0443	.0264	.0264	.0264	.0264
90.000	.6374	.1686	-.1590	-.2601	-.3278	.2338	.4656	-.3787	-.3858	-.1083	-.0874	-.0207	-.0207	-.0207	-.0207	-.0207
120.000	.7826	.2772	-.0805	-.1776	-.2496	.1646	.5412	.1696	.2734	.1530	.0206	-.0309	-.1545	-.1545	-.1545	-.1545
150.000	.8108	.3269	-.0399	-.1325	-.2314	-.0606	.3904	.3904	.1333	.1333	-.0453	-.0453	-.0453	-.0453	-.0453	-.0453
180.000	.8108	.3269	-.0399	-.1325	-.2314	-.0606	.3904	.3904	.1333	.1333	-.0453	-.0453	-.0453	-.0453	-.0453	-.0453
210.000	.8108	.3269	-.0399	-.1325	-.2314	-.0606	.3904	.3904	.1333	.1333	-.0453	-.0453	-.0453	-.0453	-.0453	-.0453
240.000	.8108	.3269	-.0399	-.1325	-.2314	-.0606	.3904	.3904	.1333	.1333	-.0453	-.0453	-.0453	-.0453	-.0453	-.0453

PAGE 4813

## ARC11-716 IAI14 OL-T10-S12N29-AT111 EXTERNAL TANK

(MB1739)

ALPHAT ( 1 ) = -0.640 BETAT ( 2 ) = -4.070

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.040	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.6300
PMI															
165.000				.3375	-.0341	-.1350	-.2179	-.1871	.3690	.5372	.4115	-.0179	-.5442	-.1808	-.1839
180.000	1.1710	1.2000	.7057	.3112	-.0551	-.1497	-.2241	-.1262	.3175	.5393	.4756	-.0463	-.0593	-.1893	-.2101
270.000		.8535							.4759						

K/LT .7480 .8530 .9280

PMI

.000	-.0094	.0591	-.0443
30.000	-.0208	.0457	.0141
60.000	.0394	.0770	.0847
90.000	.0634	.1034	
120.000	.1021	.2059	.3160
135.000	.0901	.1178	.2617
150.000	-.0242	.1329	.1363
165.000	-.0018	.1285	.3693
180.000	-.0165	.1136	.1797

ALPHAT ( 1 ) = -0.620 BETAT ( 3 ) = -.010

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.6300
PMI															
.000	1.1660	.8049	.3972	-.0354	-.3431	-.3933	-.4523	-.3693	.0216	.0961	-.0812	-.2961	-.1312	.0119	.6243
30.000			.4118	-.0454	-.3372	-.3901	-.4513	-.3851	.0785	-.0238	-.2163	-.2247	-.1416	-.0409	-.0171
60.000			.4644	.0017	-.3073	-.3637	-.4344	-.0973	.0097	-.4196	-.5508	-.2426	-.2333	-.0767	.0024
90.000		.9552	.5989	.0837	-.2477	-.3084	-.3923	.0401	.4898		-.3039	-.4130	-.0910	-.0779	-.0975
120.000			.6717	.1954	-.1636	-.2332	-.3195	.1301	.4432	.2511	.2337	.0682	-.0439	-.0759	-.2075
135.000								-.1402	.3969	.0575				-.1279	
150.000			.7646	.2705	-.1004	-.1700	-.2760	-.2019	.4266	.5170	.1912	-.1282	-.0935	-.2642	-.2782
165.000			.3078	.0608	-.1456	-.2404	-.1902	.3902	.5624	.3617	-.0629	-.0200	-.1703	-.1957	
180.000	1.1360	1.2010	.8131	.3155	-.0648	-.1367	-.2332	-.1222	.3156	.5440	.4424	-.0540	.0161	-.1503	-.1942
270.000		.9485							.4784						

K/LT .7480 .8530 .9280

PMI

.000	-.0005	.0840	-.0384
30.000	-.0120	.0755	.0066
60.000	.0291	.0984	.1765
90.000	.0079	.1069	
120.000	.0184	.0730	.1444
135.000	-.0140	.1119	.1036
150.000	-.0079	.0728	.0248

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 04-T12-S12N25+AT11 EXTERNAL TANK

(R81139)

ALPHAT (1) = -0.020 BETAT (3) = -0.010

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

165.000 .0080 .1111 .2339  
180.000 .0083 .1143 .1374

ALPHAT (1) = -0.640 BETAT (4) = 4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.000 1.1720 .7903 .3883 -.0630 -.3472 -.3964 -.4808 -.4031 .0197 .0929 -.0840 -.2983 -.1267 .0106 .0153  
30.000 .3821 -.0710 -.3922 -.4013 -.4583 -.3009 .0231 .0409 -.1826 -.2499 -.0901 -.0094 -.0171  
60.000 .3960 -.0577 -.3428 -.3944 -.3993 -.1084 -.0041 -.3088 -.5263 -.1909 -.1417 -.0858 -.0126  
90.000 .8581 .4580 -.0028 -.3102 -.3685 -.1730 -.0548 .4480 -.3636 -.4363 -.0924 -.0814 -.0875  
120.000 .5628 .0916 -.2384 -.3037 -.3668 .0593 .2995 .3065 .1827 .0434 -.0548 -.1278 -.2070  
135.000 .6775 .1963 -.1583 -.2270 -.3325 -.1731 .3274 .4402 .1049 -.2509 -.1561 -.3521 -.2757  
150.000 .2672 -.0986 -.1749 -.2674 -.2032 .3118 .4907 .3486 -.1547 -.0375 -.1158 -.1932  
165.000 1.1720 1.1980 .8041 .3111 -.0643 -.1411 -.2346 -.0698 .2769 .4872 .4464 -.0096 -.2085  
180.000 1.0450  
270.000

X/LT .7480 .8530 .9280

PMI

.000 -.0343 .0580 -.0276  
30.000 -.0385 .0695 -.0293  
60.000 -.0153 .0872 .1380  
90.000 -.0462 .0409  
120.000 -.0325 .0274 .0339  
135.000 -.0902 .0369 -.0126  
150.000 -.0609 .0010 -.1011  
165.000 -.0378 .0571 .1395  
180.000 -.0391 .0760 -.0074ORIGINAL PAGE IS  
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ARC11-716 1A14 Q1-T12-S12W23-AT11 EXTERNAL TANK (RB1739)

ALPHAT ( 1 ) = -8.670 BETAT ( 5 ) = 8.210

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI																
.000	1.1220	.7407	.3999	-.0777	-.3646	-.4166	-.4761	-.1784	-.0020	.0532	-.1339	-.2534	-.1236	-.0460	-.0288	
30.000			.3255	-.1113	-.3771	-.4250	-.4741	-.1113	.0052	.0641	-.1726	-.2411	-.0800	-.0331	-.0288	
60.000			.3252	-.1103	-.3773	-.4063	-.1106	-.0934	-.1029	-.0947	-.4450	-.1630	-.0908	-.0790	-.0482	
90.000	.7530		.3657	-.0750	-.3638	-.3153	-.0662	-.1353	.3351		-.3510	-.4264	-.1395	-.1073	-.1233	
120.000			.4552	.0039	-.3051	-.3674	-.0270	-.0237	.2625	.3001	.2052	.0030	-.0863	-.1853	-.2496	
135.000							-.0324			.3915		-.0872		-.2478		
150.000			.9871	.1170	-.2203	-.2861	-.3859	-.0693	.2628	.3644	.1153	-.3892	-.2522	-.4187	-.2998	
165.000				.2221	-.1386	-.2084	-.3041	-.1907	.2593	.4110	.3152	-.2703	-.0182	-.1613	-.2751	
180.000	1.1220	1.1160	.7804	.2926	-.0791	-.1534	-.2465	-.0346	.2608	.4244	.4311	-.0781	-.0321	-.2498	-.2869	
270.000		1.1240							.4796							
X/LT	.7460	.8530	.9280													

ALPHAT ( 2 ) = -4.490 BETAT ( 1 ) = -8.160

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI																
.000	1.1610	.8563	.4646	.0029	-.3085	-.3669	-.4311	-.3754	.0845	.0742	-.1422	-.2185	-.1441	-.0271	-.0100	
30.000			.5661	.0877	-.2371	-.3079	-.3815	-.3274	-.0263	-.1322	-.3123	-.1235	-.1302	-.1038	-.0217	
60.000			.6866	.2706	-.1937	-.2188	-.3069	-.0806	.1433	-.3493	-.5038	-.2835	-.1227	.0373	.0287	
90.000	1.1730		.7870	.2993	-.0734	-.1479	-.2424	.3280	.5548		-.5974	-.3358	-.1189	-.0258	-.0035	
120.000			.8225	.3361	-.0453	-.1223	-.2161	.1291	.4182	-.0351	.2598	.2411	.1338	.0379	-.0545	
135.000							-.1368			.1972		.1762		.0366		
150.000			.7952	.3048	-.0697	-.1435	-.2444	-.1605	.2988	.4180	.2969	.0792	-.0164	-.0905	-.1142	
165.000			.2498	-.1164	-.1869	-.2781	-.2261	.2709	.4645	.3930	.3930	.0482	.0028	-.1030	-.1556	
180.000	1.1810	1.1070	.6814	.1510	-.1522	-.2213	-.3011	-.2613	.2285	.4797	.3612	-.0745	-.0430	-.1737	-.1756	
270.000		.8035							.5169							
X/LT	.7460	.8530	.9280													

PMI



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ARC11-716 1A14 OX-T12-S12N25+AT11 EXTERNAL TANK (R81739)

ALPHAT (2) = -4.490 BETAT (1) = -8.160

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI	.000	-.0418	.0037	-.0211
30.000	-.0418	.0092	.0058	
60.000	.0210	.1132	.1098	
90.000	.0579	.1212		
120.000	.0736	.1396	.4193	
135.000	.0813	.2337	.4272	
150.000	.0791	.2407	.3643	
165.000	.0834	.2333	.4845	
180.000	.0532	.1930	.2342	

ALPHAT (2) = -4.470 BETAT (2) = -4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI	.000	1.2270	.8986	.4925	.0211	-.2895	-.341	-.4134	-.3710	.0810	.1255	-.0923	-.2529	-.1818	.0002	.0903
30.000	.5400			.5400	.0625	-.2548	-.3205	-.3913	-.3433	.0907	-.0332	-.2264	-.1959	-.1213	-.0891	-.0181
60.000	.6131			.6131	.1239	-.2064	-.2694	-.3545	-.2622	.1526	-.3217	-.5123	-.2099	-.2170	-.0264	.0180
90.000	1.0940			.6890	.2000	-.1519	-.2220	-.3101	.1771	.5498	-.5460	-.3776	-.0984	-.0347	-.0537	
120.000				.7381	.2475	-.1162	-.1895	-.2767	-.1783	.4367	.0276	.2026	.1485	.0315	-.0166	-.1347
135.000				.7507	.2550	-.1098	-.1814	-.2859	-.2177	.3195	.4479	.1559	.0155	-.0620	-.1402	-.1723
150.000					.2375	-.1233	-.1954	-.2882	-.2411	.2728	.4749	.3556	-.0522	-.0406	-.1599	-.1548
165.000				.7039	.2101	-.1410	-.2136	-.2949	-.2097	.2151	.4535	.3810	-.0812	-.0252	-.1226	-.1815
180.000				.9075						.5776						

X/LT .7460 .8530 .9280

PHI	.000	-.0122	.0459	-.0170
30.000	-.0055	.0807	.0331	
60.000	.0228	.1230	.1137	
90.000	.0181	.1635		
120.000	.0268	.0746	.3433	
135.000	.0271	.1729	.3289	
150.000	.0191	.1766	.2492	
165.000	.0362	.1929	.3673	
180.000	.0210	.1651	.2003	

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ARC11-716 1A14 01+T12+S12M23+AT11 EXTERNAL TANK (RB1739)

ALPHAT ( 2 ) = -4.460 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.2430	.9111	.4955	.0162	-.2871	-.3411	-.4121	-.3648	.0898	.1369	-.0698	-.491	-.1864	.0047	.0923	
30.000			.5035	.0286	-.2812	-.3421	-.4079	-.3593	.1008	.0559	-.1677	-.2905	-.1242	-.0381	-.0101	
60.000			.5363	.0602	-.2627	-.3226	-.3843	-.2875	.1961	-.2686	-.4876	-.1382	-.1187	-.1353	-.0076	
90.000	1.0050		.5900	.1031	-.2281	-.2920	-.3711	.0304	.5510	-.9450	-.4134	-.0905	-.0759	-.0802		
120.000			.6453	.1547	-.1877	-.2580	-.3383	-.0719	.4265	.0988	.30	.0794	-.0481	-.0688	-.1914	
135.000								-.2620		.3180		.0313		-.1048		
150.000			.6903	.1960	-.1578	-.2249	-.3290	-.2637	.2704	.3938	.1177	-.1302	-.0927	-.2398	-.2642	
165.000				.2138	-.1410	-.2148	-.3048	-.2570	.2782	.4256	.3038	-.1148	-.0222	-.1522	-.1939	
180.000	1.2430	1.1260	.7153	.2163	-.1417	-.2099	-.2995	-.1714	.2059	.4161	.3959	-.1105	.0050	-.1228	-.1701	
270.000		1.0060							.33							
X/LT	.7460	.8530	.9280													

ALPHAT ( 2 ) = -4.460 BETAT ( 4 ) = 4.170

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.2230	.8918	.4835	.0166	-.2947	-.3506	-.4185	-.3776	.0764	.1234	-.0803	-.2582	-.1752	.0274	.0367	
30.000			.4566	-.0095	-.3102	-.3679	-.4277	-.3836	.0851	.0552	-.1418	-.3198	-.1013	.0224	.0374	
60.000			.4544	-.0072	-.3105	-.3655	-.4021	-.2249	.2423	-.2068	-.4447	-.1391	-.0819	-.0627	-.0360	
90.000	.9010		.4837	.0211	-.2962	-.3524	-.3921	-.0123	.5835	-.5034	-.4556	-.0841	-.0804	-.0575		
120.000			.5391	.0651	-.2576	-.3200	-.3979	.0489	.1429	.2144	.1151	-.0167	-.0614	-.1123	-.1827	
135.000								.0579		.2374		-.0497		-.1706		
150.000			.6120	.1233	-.2117	-.2751	-.3768	.0439	.1967	.3254	.0218	-.2855	-.1864	-.3269	-.2806	
165.000				.1747	-.1729	-.2410	-.3334	-.2747	.2259	.3809	.2928	-.2151	-.0463	-.1224	-.1814	
180.000	1.2230	1.1220	.7052	.2080	-.1480	-.2156	-.3079	-.1532	.2089	.3729	.3941	-.1358	-.0111	-.1716	-.1890	
270.000		1.0980							.5392							

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(881739)

ARC11-716 1A14 Q1+T12+S12N2+AT11 EXTERNAL TANK

ALPHAT (2) = -4.480 BETAT (4) = 4.170

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI  
 .000 -.0283 .0373 -.0144  
 30.000 -.0223 .0530 -.0114  
 60.000 -.0283 .0734 .0995  
 90.000 -.0191 .0771  
 120.000 -.0086 .0505 .0546  
 135.000 -.0275 .0624 .0103  
 150.000 -.0348 .0290 -.0846  
 165.000 -.0098 .0843 .1458  
 180.000 -.0086 .1055 .0048

ALPHAT (2) = -4.480 BETAT (5) = 8.160

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.1710 .8431 .4565 -.0062 -.3091 -.3705 -.4383 -.4002 .0489 .0878 -.1231 -.2138 -.1748 -.0481 -.0182  
 30.000 .3948 -.0556 -.3404 -.3964 -.4563 -.3528 .0504 .1052 -.1415 -.2716 -.1088 -.0262 .0077  
 60.000 .3782 -.0721 -.3458 -.3996 -.4460 -.1246 .2020 -.1282 -.4083 -.1478 -.0645 -.0356 -.0227  
 90.000 .8022 .3908 -.0583 -.3446 -.3972 -.0664 -.0481 .4615 -.3954 -.4239 -.1637 -.1083 -.0983  
 120.000 .4438 -.0121 -.3162 -.3737 -.0269 -.0142 .0561 .2339 .0966 -.0250 -.1005 -.1860 -.2199  
 135.000 .5277 .0344 -.2621 -.3262 -.3298 .0002 .0045 .3108 -.1078 -.2392  
 150.000 .1319 -.2081 -.2747 -.3615 -.0736 .2981 .0650 .3987 -.2367 -.4041 -.2653  
 165.000 .1891 -.1611 -.2336 -.3195 -.1231 .3332 .2497 -.3413 -.0436 -.1572 -.2820  
 180.000 1.1690 .6765 .1891 -.1611 -.2336 -.3195 -.1231 .3332 .2497 -.3413 -.0436 -.1572 -.2820  
 270.000 .7480 .8530 .9280 .3556 .3653 -.1267 -.0466 -.2562 -.2816

X/LT .7480 .8530 .9280

PHI  
 .000 -.0674 -.0081 -.0339  
 30.000 -.0491 .0379 -.0287  
 60.000 -.0333 .0457 .0711  
 90.000 -.0998 .0071  
 120.000 -.0672 .0235 .0485  
 135.000 -.0852 .0429 .0159  
 150.000 -.0872 .0024 -.1310  
 165.000 -.0809 .0256 .1714  
 180.000 -.0807 .0318 -.0207

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## DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14 - VOL. 9

(R81739)

ARC11-716 IAI14 Q1+712+512M25+AT11 EXTERNAL TANK

ALPHAT ( 3 ) = -.330 BETAT ( 1 ) = -4.100

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PHI															
.000	1.2470	.9931	.9879	.0977	-.2333	-.2946	-.3708	-.3285	.1431	.1499	-.0597	-.2022	-.1919	-.0349	.0491
30.000			.6370	.1423	-.1962	-.2637	-.3412	-.2988	.1016	.0348	-.2092	-.1632	-.0992	-.0814	-.0066
60.000			.6811	.1859	-.1627	-.2307	-.3165	-.2478	.2849	-.2020	-.3613	-.1388	-.0794	-.1098	.0068
90.000		1.1160	.7080	.2129	-.1464	-.2169	-.2920	.0587	.5787		-.3052	-.4704	-.2572	-.0988	-.0382
120.000			.6936	.2030	-.1526	-.2233	-.3068	-.2197	.3511	-.1103	-.1175	.0773	.0830	.0257	-.0712
135.000								-.2479		.1188		-.0593		.0233	
150.000			.6671	.1723	-.1743	-.2430	-.3337	-.2599	.2690	.3532	.1256	-.0958	-.0586	-.1058	-.1130
165.000				.1367	-.2012	-.2642	-.3485	-.3004	.1956	.4006	.2759	-.0593	-.0237	-.1349	-.0965
180.000			.6074	.1097	-.2167	-.2815	-.3580	-.2180	.1392	.3537	.3221	-.1132	.0009	-.0705	-.1013
270.000			.9245						.6217						

W/LT .7480 .6530 .9280

PHI

.000	.0181	.0411	-.0029
30.000	.0216	.0764	.0267
60.000	.0621	.1550	.1035
90.000	.0579	.1853	
120.000	.0382	.1915	.3973
135.000	.0494	.2609	.4021
150.000	.0602	.2609	.3586
165.000	.0779	.2671	.3779
180.000	.0640	.2300	.2186

ALPHAT ( 3 ) = -.520 BETAT ( 2 ) = .010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PHI															
.000	1.2610	1.0100	.9936	.1086	-.2256	-.2873	-.3633	-.3235	.1350	.1629	-.0341	-.1975	-.2035	-.0287	.0274
30.000			.9966	.1056	-.2239	-.2905	-.3628	-.3230	.1165	.1181	-.1441	-.2287	-.1104	-.0309	.0147
60.000			.9983	.1086	-.2236	-.2844	-.3748	-.2652	.3103	-.1509	-.3291	-.1453	-.0396	-.0570	-.0342
90.000		1.0280	.6056	.1181	-.2204	-.2836	-.3417	-.0945	.5946		-.5266	-.4753	-.1729	-.1295	-.0693
120.000			.6103	.1223	-.2162	-.2819	-.3598	-.2515	.3836	-.0379	-.0834	.0110	-.0167	-.0230	-.1330
135.000								-.3075		.2060		-.1334		-.0437	
150.000			.6180	.1200	-.2142	-.2770	-.3713	-.3035	.1998	.3785	.0278	-.2050	-.0875	-.1481	-.2065
165.000				.1201	-.2105	-.2765	-.3605	-.3102	.1973	.3419	.2744	-.1483	-.0461	-.1034	-.1460
180.000			.6165	.1209	-.2110	-.2765	-.3600	-.1404	.1477	.3294	.3439	-.1801	-.0327	-.0954	-.1417
270.000			.9280						.5988						

W/LT .7480 .6530 .9280

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4881

ARC11-716 IAI4 01+712+512N25+AT11 EXTERNAL TANK

(R01739)

ALPHAT ( 3 ) = -.520 BETAT ( 2 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

.000	.0339	.0681	.0223
30.000	.0362	.0983	.0278
60.000	.0277	.1274	.0833
90.000	.0603	.1588	
120.000	.0610	.1431	.2625
135.000	.0606	.1989	.2124
150.000	.0417	.1790	.146
165.000	.0614	.2023	.2299
180.000	.0744	.2007	.1313

ALPHAT ( 3 ) = -.530 BETAT ( 3 ) = 4.080

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000	1.2450	.9837	.5819	.0952	-.2305	-.2959	-.3686	-.3286	.1069	.1579	-.0490	-.1994	-.2017	-.0372	.0497
30.000			.5336	.0597	-.2619	-.3242	-.3913	-.3366	.1870	.1450	-.1154	-.2994	-.1331	.0141	.0355
60.000			.5078	.0275	-.2757	-.3326	-.4156	-.1658	.2665	-.0820	-.3010	-.1609	-.0534	-.0021	.0060
90.000		.9267	.5010	.0235	-.2799	-.3413	-.3416	-.0728	.5082		-.5356	-.3389	-.1243	-.1028	-.0476
120.000			.5159	.0505	-.2740	-.3356	-.4056	-.0432	.3039	.0413	-.0623	-.0077	-.0765	-.0555	-.1293
135.000								-.0527		.2570		-.1534		-.1048	
150.000			.5556	.0711	-.2564	-.3134	-.4051	-.0345	.1326	.2789	.0217	-.3659	-.1616	-.2380	-.2121
165.000				.0948	-.2323	-.2996	-.3786	-.2985	.1801	.3054	.2424	-.2463	-.0802	-.1015	-.1222
180.000	1.2450	1.0400	.6104	.1172	-.2167	-.2835	-.3619	-.2035	.1458	.3153	.3472	-.1838	-.0091	-.1401	-.1406
270.000		1.1140							.5819						

X/LT .7460 .8330 .9280

PHI

.000	.0141	.0326	.0056
30.000	.0116	.0560	.0120
60.000	.0049	.0866	.0638
90.000	.0316	.1080	
120.000	.0378	.1010	.0917
135.000	.0149	.1132	.0491
150.000	.0197	.0759	-.0460
165.000	.0304	.1313	.1781
180.000	.0333	.1522	.0287

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OF FOUR OF ALPHAT

ARC11-716 1A14 OL+712+S12N29+AT11 EXTERNAL TANK (R81739)

ALPHAT (3) = -.340 BETAT (4) = 0.200

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
$\rho_{H1}$															
.000	1.1920	.9405	.5490	.0728	-.2493	-.3120	-.3887	-.3504	.0693	.0919	-.0958	-.1603	-.1847	-.1097	-.0384
30.000			.4621	.0035	-.3013	-.3663	-.4304	-.3827	.0945	.1200	-.1159	-.2585	-.1405	-.0367	-.0100
60.000			.4206	-.0465	-.3304	-.3818	-.4557	-.0439	.2117	-.0424	-.2356	-.1598	-.0668	-.0392	-.0192
90.000		.8193	.4043	-.0472	-.3353	-.3900	-.4367	.0022	.6184		-.4564	-.0255	-.0470	-.0801	-.0863
120.000			.4222	-.0328	-.3277	-.3823	-.3849	-.0605	.0707	.1292	-.0307	-.0369	-.0858	-.1372	-.1791
150.000								-.0325	.1708			-.1379		-.1720	
180.000			.4756	.0084	-.3003	-.3577	-.4219	-.0121	.1056	.1665	-.0017	-.4018	-.1755	-.3219	-.2208
210.000			.0520	-.2655	-.3293	-.4094	-.0106	.1481	.2583	.1939	-.3764	-.0457	-.1545	-.2072	
240.000			.0976	-.2313	-.2985	-.3774	-.0335	.1524	.2611	.2954	-.1809	-.0450	-.2214	-.2165	
270.000								.5914							

X/LT .7460 .8530 .9280

 $\rho_{H1}$ 

.000	-.0375	-.0009	-.0373
30.000	-.0255	.0349	-.0154
60.000	-.0330	.0551	.1088
90.000	-.0726	.0780	
120.000	-.0235	.0735	.1016
150.000	-.0410	.0894	.0655
180.000	-.0539	.0566	-.0943
210.000	-.0397	.0705	.2235
240.000	-.0402	.0817	-.0066

ALPHAT (4) = 3.950 BETAT (1) = -8.200

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
$\rho_{H1}$															
.000	1.1910	.9390	.5619	.1796	-.1735	-.2424	-.3213	-.2838	.0105	.1076	-.0519	-.1153	-.1231	-.0781	-.0229
30.000			.7701	.2408	-.0909	-.1640	-.2325	-.2118	.1528	.0197	-.1438	-.0816	-.0456	-.0421	-.0112
60.000			.8217	.3270	-.0509	-.1243	-.2243	-.0129	.3801	-.1321	-.1994	-.1017	.0266	.0299	.0244
90.000		1.1800	.7530	.2051	-.0704	-.1472	-.2010	.0683	.5526		-.3710	-.2382	-.1391	-.2094	-.0861
120.000			.5955	.2138	-.1442	-.2145	-.3018	-.0514	.1615	-.3121	-.4176	-.2463	.1923	.1753	.0838
150.000								-.2314		-.1757		-.1700		.1380	
180.000			.6005	.1122	-.2184	-.2826	-.3718	-.3123	.0267	.1831	.1399	-.1871	.0179	.0018	-.0053
210.000			.0537	-.2597	-.3336	-.4090	-.3401	.1395	.3351	.2474	-.0607	-.1643	-.0440	-.0078	
240.000			.4817	.0140	-.2953	-.3541	-.4065	.3226	.1375	.3775	.2616	-.1596	-.1066	-.0057	-.0553
270.000			.8083												

X/LT .7460 .8530 .9280

 $\rho_{H1}$ 

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 02+112+512N23+AT11 EXTERNAL TANK (R81739)

ALPHAT( 4) = 3.990 BETAT( 1) = -8.200

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8330 .9280

PMI  
.000 .0022 .0027 -.0489  
30.000 .0448 .0913 -.0130  
60.000 .0761 .1797 .0939  
90.000 .0734 .0378  
120.000 .1636 .3136 .5679  
135.000 .1770 .3832 .5438  
150.000 .1615 .3441 .4985  
165.000 .1762 .3345 .5107  
180.000 .1391 .2746 .2669

ALPHAT( 4) = 3.980 BETAT( 2) = -4.090

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5090 .6380

PMI  
.000 1.2400 1.0910 .6949 .1988 -.1903 -.2179 -.3031 -.2673 .0558 .1976 -.0021 -.1340 -.1440 -.0604 .0188  
30.000 .7355 .2393 -.1204 -.1924 -.2741 -.2371 .1995 .1104 -.1038 -.1209 -.0862 -.0443 -.0048  
60.000 .7362 .2418 -.1184 -.1865 -.2855 -.1883 .3872 -.0830 .1943 .1308 .0003 .0056 .0083  
90.000 1.0980 .6972 .2067 .1474 .2179 .3034 .0690 .5483 .4314 .2318 .0143 .0528 .0473  
120.000 .6265 .1414 .1972 .2633 .3443 .2425 .2122 .2419 .3646 .2765 .0794 .0948 .0011  
135.000 .5696 .0903 .2378 .2979 .3859 .3176 .1943 .2493 .1434 .2592 .1098 .0262 .0492  
150.000 .0557 .2582 .3244 .4018 .3388 .1424 .3272 .2906 .0843 .1620 .0398 .0137  
165.000 .0330 .2773 .3360 .4055 .1376 .0881 .2662 .3054 .1596 .2372 .0262 .0342  
180.000 .9175 .9361 .5096 .0330 .2773 .3360 .4055 .1376 .0881 .2662 .3054 .1596 .2372 .0262 .0342  
270.000 .9175 .9361 .5096 .0330 .2773 .3360 .4055 .1376 .0881 .2662 .3054 .1596 .2372 .0262 .0342

X/LT .7480 .8330 .9280

PMI  
.000 .0471 .0472 .0655  
30.000 .0466 .0953 .0591  
60.000 .0557 .1940 .1121  
90.000 .0523 .1632  
120.000 .2798 .2480 .4275  
135.000 .1002 .3135 .4117  
150.000 .1057 .2986 .3693  
165.000 .1203 .3041 .3926  
180.000 .1117 .2365 .2132



ARC11-71.6 1A14 CA+T12+S12N25+AT11 EXTERNAL TANK (RB1739)

ALPHAT(4) = 3.950 BETAT(3) = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2330	1.1020	.7013	.2500	-.1467	-.2209	-.3016	-.2597	.1344	.2079	.0087	-.1416	-.1321	-.0478	.0186
30.000			.6864	.1839	-.1590	-.2329	-.3108	-.2670	.1647	.1535	-.0889	-.1436	-.1078	-.0481	.0166
60.000			.6473	.1442	-.1854	-.2534	-.3420	-.1999	.3140	-.0253	-.1862	-.1265	-.0461	-.0292	-.0057
90.000		1.0120	.5956	.1113	-.2195	-.2688	-.3622	-.0672	.5660		-.4917	-.2133	-.0486	-.0843	-.0731
120.000			.5493	.0766	-.2498	-.3144	-.3782	-.3053	.2908	-.1747	-.3132	-.2373	.0172	.0310	-.0722
150.000								-.3327	.0762			-.3097		.0236	
180.000			.5280	.0545	-.2613	-.3282	-.4121	-.3305	.1622	.7919	.0723	-.2859	-.1194	-.0460	-.1239
190.000				.0376	-.2582	-.3322	-.4051	-.2818	.1135	.2589	.2714	-.1353	-.1159	-.0204	-.0747
193.000	1.2330	.9373	.5109	.0324	-.2734	-.3339	-.4036	-.1187	.1108	.2637	.3204	-.2331	-.0903	-.0120	-.0637
270.000		1.0120						.5715							

K/LT .7460 .8330 .9280

PHI

.000	.0438	.1022	.0638
30.000	.0480	.1159	.0670
60.000	.0445	.1501	.1257
90.000	.0629	.1663	
120.000	.1050	.2117	.2866
150.000	.1030	.2457	.2587
180.000	.0680	.2289	.2048
190.000	.0891	.2354	.2356
193.000	.1010	.2339	.1267

ALPHAT(4) = 3.950 BETAT(4) = 4.110

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2370	1.0840	.6640	.1944	-.1172	-.2264	-.3058	-.2678	.0386	.1986	-.0015	-.1362	-.1576	-.0599	.0430
30.000			.6138	.1260	-.2075	-.2733	-.3501	-.3092	.2529	.2053	-.0793	-.1802	-.1100	-.0599	.0428
60.000			.5467	.0582	-.2552	-.3138	-.3971	-.2803	.3589	.0343	-.2051	-.0587	-.0773	-.0326	.0094
90.000		.9156	.4972	.0311	-.2675	-.3347	-.4183	-.0017	.6108		-.5037	-.1161	-.1228	-.0867	-.0359
120.000			.4722	.0023	-.3021	-.3580	-.4086	-.1833	.2651	-.0632	-.2413	-.0816	-.0493	-.0245	-.0679
150.000								-.0800	.1630			-.2386		-.0337	
180.000			.4767	.0016	-.3028	-.3582	-.4381	-.0588	.0834	.2815	.0182	-.3961	-.1429	-.1055	-.1440
190.000				.0172	-.2932	-.3538	-.4258	-.1177	.1130	.2898	.2091	-.2332	-.1120	-.0165	-.0540
193.000	1.2370	.9361	.5079	.0274	-.2645	-.3354	-.4171	-.1721	.0916	.2703	.3251	-.2405	-.0433	-.0357	-.0684
270.000		1.1030						.5634							

K/LT .7460 .8330 .9280

PHI

.000	.0438	.1022	.0638
30.000	.0480	.1159	.0670
60.000	.0445	.1501	.1257
90.000	.0629	.1663	
120.000	.1050	.2117	.2866
150.000	.1030	.2457	.2587
180.000	.0680	.2289	.2048
190.000	.0891	.2354	.2356
193.000	.1010	.2339	.1267



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OL+712+S12M25+AT11 EXTERNAL TANK (RB1730)

ALPHAT (4) = 3.920 BETAT (4) = 4.110

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0330 .9200

PHI  
.000 .0642 .0332 .0855  
30.000 .0338 .0493 .0494  
60.000 .0433 .0767 .0800  
90.000 .0645 .1080  
120.000 .0764 .1436 .1063  
150.000 .0635 .1523 .0715  
180.000 .0630 .1172 -.0185  
210.000 .0725 .1682 .1903  
240.000 .0792 .1881 .0399

ALPHAT (4) = 3.960 BETAT (5) = 0.210

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
PHI  
.000 1.1900 1.0400 .6590 .1805 -.1651 -.2365 -.3192 -.2847 .0318 .0980 -.0473 -.1120 -.1451 -.0754 -.0419  
30.000 .5356 .0642 -.2569 -.3209 -.3906 -.3552 .1288 .1428 -.0733 -.1544 -.1093 -.0609 -.0156  
60.000 .4447 -.0135 -.3148 -.3703 -.3806 -.2083 .2380 .0893 -.1456 -.0449 -.0930 -.0903 -.0355  
90.000 .8080 .3970 -.0534 -.3401 -.3945 -.4471 -.0527 .6037 .4348 .0298 .1070 .0972 .0645  
120.000 .3847 -.0614 -.3450 -.3947 -.4565 -.0534 .1387 -.0191 -.2044 -.0638 .0872 .0934 .1207  
150.000 .4089 -.0507 -.3384 -.3847 -.4655 -.0773 .0326 .1869 .0224 .4400 .1725 .2221 .1773  
180.000 .0224 -.3171 -.3758 -.4491 .0619 .0893 .1818 .3692 .1818 .0927 .1227 .1351  
210.000 .4820 .0069 -.2979 -.3584 .4321 .0485 .1153 .2190 .2625 .2325 .0561 .1819 .1541  
240.000 1.1830

W/LT .7400 .0330 .9200

PHI  
.000 .0039 .0118 -.0254  
30.000 .0273 .0366 .0167  
60.000 .0149 .0696 .0794  
90.000 .0288 .1060  
120.000 .0265 .1265 .1235  
150.000 .0096 .1213 .0896  
180.000 -.0040 .0832 -.0811  
210.000 .0133 .0982 .2572  
240.000 .0044 .1071 .0003

(R01739)

ARC11-718 IAL4 CR+112+512N25+AT11 EXTERNAL TANK

ALPHAT ( 5 ) = 7.900 BETAT ( 1 ) = -0.210

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0040	.0080	.0120	.0160	.0200	.0240	.0280	.0320	.0360	.0400	.0440	.0480	.0520	.0560	.0600
PHI	1.1450	1.1130	.7545	.2727	-.0932	-.1670	-.2554	-.2136	.0487	.1333	-.0081	-.0443	-.0629	-.0593	-.0490	.0330
30.000	.8596	.3723	-.0064	-.0909	-.1828	-.1253	.2415	.0908	-.1024	-.0117	.0111	.0046	.0268	.0268	.0268	.0268
60.000	.8646	.3782	-.0037	-.0798	-.1897	.2126	.4612	.4612	-.0320	-.0239	.0363	.0341	.0699	.0699	.0699	.0699
90.000	.7649	.2686	-.0821	-.1589	-.2099	.4158	.4858	.4858	-.3362	-.1785	.0046	.0569	.0776	.0776	.0776	.0776
120.000	.6124	.1423	-.1976	-.2675	-.3480	.0663	.0051	.0051	-.1686	-.3171	-.2413	.0361	.1298	.1156	.1156	.1156
150.000	.4943	.0301	-.2832	-.3473	-.4335	-.3208	-.1108	.2087	.0498	-.2242	-.0330	.0144	.0365	.0365	.0365	.0365
180.000	.3836	-.0314	-.3312	-.3906	-.4550	-.3969	.0530	.3161	.2281	-.0737	-.1739	-.0090	.0332	.0332	.0332	.0332
210.000	.2794	-.0800	-.3514	-.4039	-.4315	-.3770	.1082	.3310	.2594	-.1900	-.0932	-.0112	-.0033	-.0033	-.0033	-.0033
240.000	.1740	-.0530	-.3280				.3114									

K/LT .7460 .6530 .5280

PHI .0000 .0295 .0100

30.000 .0999 .1273 .0617

60.000 .1340 .2162 .1307

90.000 .1346 .2063 .1476

120.000 .1962 .2936 .1735

150.000 .2231 .3659 .2051

180.000 .1316 .3418 .1467

210.000 .1596 .3252 .1123

240.000 .1663 .2815 .2723

ALPHAT ( 8 ) = 0.010 BETAT ( 2 ) = -4.080

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0040	.0080	.0120	.0160	.0200	.0240	.0280	.0320	.0360	.0400	.0440	.0480	.0520	.0560	.0600
PHI	1.1930	1.1730	.7923	.2971	-.0734	-.1499	-.2417	-.1936	.1162	.2233	.0446	-.0582	-.0513	-.0481	.0061	.0061
30.000	.8216	.3271	-.0500	-.1303	-.2171	-.1754	.2531	.1708	-.0615	-.0208	-.0215	-.0203	.0101	.0101	.0101	.0101
60.000	.7742	.2833	-.0835	-.1566	-.2580	-.1198	.4470	.0133	-.1185	.0114	.0058	.0058	.0058	.0058	.0058	.0058
90.000	.6668	.1863	-.1652	-.2356	-.3111	.1275	.4689	.4689	-.3864	-.1530	.0059	.0076	.0076	.0076	.0076	.0076
120.000	.5430	.0728	-.2500	-.3179	-.3902	-.2486	.0156	.0156	-.1251	-.3786	-.2375	.0331	.0891	.0509	.0509	.0509
150.000	.4678	.0035	-.3046	-.3633	-.4394	-.3586	.0985	.0985	-.0517	-.3254	-.3079	-.0993	-.0131	-.0131	-.0131	-.0131
180.000	.3878	-.0278	-.3297	-.3867	-.4277	-.3764	.1204	.2580	.2142	-.1086	-.1224	-.0076	.0317	.0317	.0317	.0317
210.000	.3039	-.0562	-.3578	-.3918	-.4541	-.3103	.0493	.2712	.2943	-.2292	-.1276	.0036	.0036	.0036	.0036	.0036
240.000	.2061						.4932									

K/LT .7460 .6530 .5280

PHI



(R81790)

DATE 06 JAN 75 TABULATED MEASURE DATA - 1A14A - VOL. 5  
ARC11-716 1A14 OF 12-S12M9-AT11 EXTERNAL TANK

ALPHAT( 3 ) = 0.010 BETAT ( 2 ) = -4.080

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0000 .9200

PHI  
.000 .0000 .0754 .0861  
30.000 .0002 .1303 .0777  
60.000 .0007 .1802 .1077  
90.000 .0009 .1618  
120.000 .1414 .2903 .4271  
150.000 .1629 .3363 .4102  
180.000 .1409 .3176 .3717  
165.000 .1643 .3106 .3986  
180.000 .1549 .2693 .2104

ALPHAT( 3 ) = 0.080 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0000 .0490 .1130 .1700 .1940 .2150 .2420 .2900 .3400 .3940 .4310 .5050 .5900 .6300

PHI  
.000 1.2000 1.1030 .7902 .3032 -.0713 -.1400 -.2309 -.1968 .0777 .2575 .0633 -.0778 -.0361 -.0087 .0153  
30.000 .7612 .2702 -.1002 -.1764 -.2619 -.2211 .2332 .2301 -.0236 -.0667 -.0333 -.0814 .0145  
60.000 .6731 .1859 -.1666 -.2340 -.3294 -.2280 .4543 .0618 -.1151 -.0215 -.0095 -.0015 .0148  
90.000 .5673 .0896 -.2427 -.3076 -.3940 .0815 .4843 -.3790 -.0669 .0197 -.0094 -.0261  
120.000 .4768 .0145 -.2598 -.3611 -.4206 -.2109 .1635 -.1904 -.4102 -.2063 .0022 .0300 .0016  
150.000 .4359 -.0274 -.3267 -.3799 -.4038 -.2227 .1129 .2226 .0351 -.3489 -.1124 -.0431 -.0353  
180.000 .0429 -.3359 -.3883 -.4418 -.0315 .0160 .2308 .2410 -.1223 -.1132 .0020 .0038  
165.000 .4133 -.0446 -.3364 -.3898 -.4436 -.0361 .3391 .2226 .9023 -.3139 -.1265 .0033 .0156  
180.000 .9649

W/LT .7400 .0000 .9200

PHI  
.000 .0915 .1291 .1136  
30.000 .0357 .1365 .0807  
60.000 .0654 .1515 .0617  
90.000 .0674 .1398  
120.000 .1280 .2422 .2240  
150.000 .1216 .2366 .2140  
180.000 .1103 .2394 .1492  
165.000 .1455 .2573 .2798  
180.000 .1505 .2559 .1343

ARC.1-716 IAI14 CL+712+312M9+7111 EXTERNAL TANK (081730)

ALPHAT (S) = 0.000 BETAT (A) = 4.140

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5500	.6300
PMI															
.200	1.1190	1.1640	.7610	.2910	-.0746	-.1528	-.2426	-.1994	.0526	.2208	.0403	-.0646	-.0590	-.0483	.0036
30.000			.6039	.2000	-.1306	-.2217	-.3042	-.2656	.2786	.2365	-.0206	-.1101	-.0989	-.0798	.0368
60.000			.5680	.0899	-.2379	-.3222	-.3857	-.3020	.4567	.1122	-.0966	-.0965	-.0637	-.0276	.0430
90.000		.8001	.4672	.0068	-.3019	-.3540	-.4064	-.0878	.4910		-.3723	-.3036	.0180	.0131	.0091
120.000			.4082	-.0455	-.3356	-.3903	-.4224	-.1994	.1737	-.0314	-.3361	-.2085	-.0034	.0728	-.0037
150.000						-.1722			.1490		-.3333			.0136	
180.000			.3936	-.0603	-.3430	-.3965	-.4673	-.1070	.0864	.2755	.0368	-.3786	-.1483	-.0342	-.0736
210.000				-.0608	-.3425	-.3962	-.4616	-.0897	.0645	.2753	.2062	-.1941	-.1249	.0136	.0183
240.000	1.1190	.8279	.4077	-.0554	-.3400	-.3920	-.4591	-.0927	.0557	.2432	.3037	-.2847	-.1027	.0131	.0029
270.000		1.0610							.4876						
X/LT	.7400	.8530	.9280												

## PMI

.000	.0361	.0724	.0813
30.000	.0360	.0563	.0563
60.000	.0443	.1043	.1537
90.000	.0847	.1607	
120.000	.1086	.1749	.1047
150.000	.1039	.1603	.0823
180.000	.0948	.1470	-.0020
210.000	.1112	.1932	.1853
240.000	.1217	.2049	.0311

ALPHAT (S) = 7.977 BETAT (A) = 8.290

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5500	.6300
PMI															
.200	1.1420	1.1180	.7572	.2813	-.0873	-.1637	-.2569	-.2157	.0340	.1200	.0023	-.0441	-.0789	-.0602	-.0336
30.000			.4937	.1257	-.2106	-.2816	-.3590	-.3265	.1678	.2039	-.0126	-.0978	-.1284	-.1048	-.0627
60.000			.4508	-.0071	-.3152	-.3779	-.3020	-.2235	.2852	.1616	-.0524	-.0976	-.0841	-.0771	-.0122
90.000		.7562	.3631	-.0790	-.3530	-.3976	-.3642	-.1244	.5172		-.3957	-.1940	-.0473	-.0614	-.0700
120.000			.3291	-.1070	-.3756	-.3992	-.3778	-.1033	.1441	-.0162	-.3169	-.0798	-.0463	-.0434	-.0651
150.000						-.1763			.1621		-.2897			-.0551	
180.000			.3371	-.1077	-.3758	-.4209	-.4040	-.1022	.0470	.2363	.0177	-.4237	-.1342	-.1274	-.1107
210.000				-.0979	-.3680	-.4227	-.2797	-.1168	.0560	.2275	.1717	-.3227	-.0997	-.0637	-.0804
240.000	1.1420	.7056	.3830	-.0776	-.3503	-.4158	-.4796	-.1743	.0205	.1913		-.2750	-.0776	-.0985	-.0602
270.000		1.1420							.4937						
X/LT	.7400	.8530	.9280												

## PMI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-7 1A14 01+T12+S12M23+AT11 EXTERNAL TANK (RB1739)

ALPHAT (S) = 7.900 BETAT (S) = 8.290

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8550	.9280
PHI			
.000	.0462	.0326	.0332
30.000	.0305	.0144	.0541
60.000	.0554	.0925	.1362
90.000	.0392	.1473	
120.000	.0726	.1510	.1061
135.000	.0564	.1535	.0874
150.000	.0368	.1117	-.0416
165.000	.0602	.1345	.2582
180.000	.0447	.1268	.0162

ORIGINAL PAGE IS  
 OF POOR QUALITY

PARAMETRIC DATA

MACH = 1.400 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 29.5800 INCHES  
LREF = 30.7090 INCHES YMRP = .0000 INCHES  
BREF = 30.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

ALPHAT ( 1 ) = -8.470 BETAT ( 1 ) = -8.190

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.0000	1.2470	.8032	.4270	.0182	-.2303	-.2745	-.3230	-.2882	-.2339	.0903	-.0547	-.1884	-.1813	-.1586
30.000				.5123	.0912	-.1806	-.2319	-.2914	-.2804	-.0726	-.1978	-.4026	-.2090	-.1337	-.1387
60.000				.6563	.2132	-.0878	-.1436	-.2215	-.2031	.0861	-.2874	-.5099	-.3652	-.2914	-.0099
90.000				.8173	.3497	.0209	-.0449	-.1275	-.0634	.6106	-.4876	-.0909	-.1754	-.0743	-.0599
120.000				.9181	.4432	.0934	.0213	-.0622	-.0381	.5563	.1927	-.0963	.3921	.2310	.1639
135.000									-.0310		.2298		.2704	.1923	
150.000				.9351	.4527	.1011	.0293	-.0627	.2113	.4366	.3527	.2066	.0906	.0782	.0201
165.000				.4115	.0661	-.0025	-.0876	-.0613	-.0246	.5327	.4578	.2767	.0097	.0253	.0149
180.000				.6326	.0294	-.0354	-.1108	-.0966	-.0310	.5288	.4352	.2144	.0268	.0413	-.0671
270.000				1.2470	1.2580	.8032									
X/LT	.7460	.8530	.9280												

X/LT .7460 .8530 .9280

PMI	.0000	1.2470	.8032	.4270	.0182	-.2303	-.2745	-.3230	-.2882	-.2339	.0903	-.0547	-.1884	-.1813	-.1586
30.000				.5123	.0912	-.1806	-.2319	-.2914	-.2804	-.0726	-.1978	-.4026	-.2090	-.1337	-.1387
60.000				.6563	.2132	-.0878	-.1436	-.2215	-.2031	.0861	-.2874	-.5099	-.3652	-.2914	-.0099
90.000				.8173	.3497	.0209	-.0449	-.1275	-.0634	.6106	-.4876	-.0909	-.1754	-.0743	-.0599
120.000				.9181	.4432	.0934	.0213	-.0622	-.0381	.5563	.1927	-.0963	.3921	.2310	.1639
135.000									-.0310		.2298		.2704	.1923	
150.000				.9351	.4527	.1011	.0293	-.0627	.2113	.4366	.3527	.2066	.0906	.0782	.0201
165.000				.4115	.0661	-.0025	-.0876	-.0613	-.0246	.5327	.4578	.2767	.0097	.0253	.0149
180.000				.6326	.0294	-.0354	-.1108	-.0966	-.0310	.5288	.4352	.2144	.0268	.0413	-.0671

ALPHAT ( 1 ) = -8.440 BETAT ( 2 ) = -4.080

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.0000	1.2910	.8403	.4538	.0301	-.2119	-.2564	-.3070	-.2778	-.2102	.1129	.0212	-.1292	-.2169	-.1555
30.000				.4946	.0656	-.1905	-.2400	-.2946	-.2694	-.1477	-.1109	-.2180	-.2098	-.1411	-.1061
60.000				.5906	.1446	-.1352	-.1893	-.2621	-.2384	.0756	-.2875	-.4655	-.3857	-.2574	-.0833
90.000				.7158	.2548	-.0322	-.1155	-.1910	-.1311	.5945	-.4318	-.1139	-.2235	-.1751	-.1228
120.000				.8246	.3506	.0185	-.0477	-.1265	-.1066	.3949	.2431	-.0450	.3105	.1600	.1030
135.000									-.0842		.3812		.5951	.1356	
150.000				.8788	.3936	.0343	-.0142	-.1064	-.0665	.1530	.4908	.3074	.1464	.0037	-.0502



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+T12+312N25+AT11 EXTERNAL TANK

(RB1740)

ALPHAT ( 1 ) = -8.440 BETAT ( 2 ) = -4.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000					.3928	.0338	-.0137	-.0995	-.0784	-.0211	.4668	.4831	.2232	.0845	-.0036
180.000	1.2910	1.2740	.8508	.3696	.0400	-.0289	-.1053	-.1000	-.0163	.4156	.5109	.2152	-.0041	.0271	-.0171
270.000		.9088							.5162						

X/LT .7460 .8330 .9280

PHI

.000 -0.0008 -0.0161 -0.0019

30.000 -0.0299 -0.0252 .0363

60.000 -0.0355 -0.0139 .1448

90.000 -0.0629 -0.0388

120.000 -0.0785 -0.0166 .3431

150.000 -0.0533 .0987 .2458

180.000 -0.1168 .1105 .1741

210.000 -0.1006 .1192 .4218

240.000 -0.1021 .1180 .2829

ALPHAT ( 1 ) = -8.420 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000	1.3120	.8614	.4615	.0368	-.2126	-.2545	-.3092	-.2824	-.1792	.1052	.0365	-.1292	-.2314	-.1574	.0080
180.000			.4748	.0494	-.2059	-.2533	-.3080	-.2650	-.1113	.0120	-.1318	-.2121	-.1538	-.1246	-.0372
200.000			.5221	.0902	-.1810	-.2289	-.2953	-.2476	.0799	-.2758	-.4812	-.3666	-.1147	-.0509	-.0632
220.000	1.0220		.6167	.1699	-.1239	-.1807	-.2516	-.2231	.5820	-.3102	-.1679	-.2735	-.0490	-.1099	
240.000			.7254	.2674	-.0518	-.1136	-.1916	-.1713	.2610	.3377	.0324	.2347	.0725	.0419	-.0876
260.000								-.1406		.4005	.1645			.0511	
280.000			.8154	.3343	.0028	-.0609	-.1474	-.1214	.0078	.5122	.2047	.0257	-.0442	-.0500	-.1432
300.000			.3719	.0323	-.0346	-.1217	-.0987	-.0451	.5374	.4276	.1375	.0778	.0125	-.0326	
320.000	1.3120	1.2810	.8670	.3779	.0408	-.0291	-.1116	-.0856	-.0126	.4013	.5168	.1866	.0986	-.0016	-.0889
340.000		1.0210							.5757						

X/LT .7460 .8330 .9280

PHI

.000 .0166 -.0151 .0229

30.000 -.0100 -.0186 .0264

60.000 -.0251 -.0126 .1452

90.000 -.0652 -.0043

120.000 -.1199 -.0050 .1475

150.000 -.1333 .0558 .0917

180.000 -.1737 .0342 .0857

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ARC11-716 1A14 04+T12+S12N25+AT11 EXTERNAL TANK

(R81740)

ALPHAT(1) = -0.480 BETAT(3) = .000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

165.000 -.1156 .0676 .3143

180.000 -.1355 .0606 .2995

ALPHAT(1) = -0.430 BETAT(4) = 4.120

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5980 .6380

PHI

.000 1.2930 .8452 .4551 .0365 -.2131 -.2578 -.3073 -.2839 -.1957 .0851 .0023 -.1353 -.2229 -.1541 .0080

30.000 .4493 .2198 -.2631 -.3063 -.2776 -.0492 .0353 -.0442 -.2015 -.1656 -.1169 -.0091

60.000 .4596 .0375 -.2103 -.2533 -.3078 -.2659 .0578 -.2259 -.4679 -.2667 -.0766 -.0980 -.0552

90.000 .9131 .5175 .0889 -.1786 -.2281 -.2913 -.1962 .5479 -.2336 -.2051 -.2917 -.0271 -.0887

120.000 .6149 .1795 -.1166 -.1728 -.2393 -.2218 .1561 .4404 .1179 .1711 .0339 .0268 -.1304

135.000 .7284 .2691 -.0451 -.1054 -.1002 -.1623 .2241 .3664 .2395 -.1353 -.0209 -.1142 -.8091

150.000 .3410 .0105 -.0581 -.1385 -.1172 -.0302 .3727 .4057 .0566 .0422 .0689 -.0908

165.000 1.2930 1.2760 .8568 .3747 .0412 -.0274 -.1095 -.0720 .4799 .1620 .1224 .0092 -.0850

270.000 1.1250

X/LT .7460 .8330 .9280

PHI

.000 -.0008 -.0216 -.0075

30.000 -.0141 -.0272 .0233

60.000 -.0229 -.0196 .1545

90.000 -.0723 -.0100 .0457

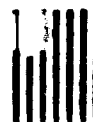
120.000 -.0978 -.0130 .0457

135.000 -.1137 -.0060 .0112

150.000 -.1374 -.0206 -.0846

165.000 -.0972 .0276 .1676

180.000 -.1376 .0510 .0725



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-71.6 1A14 04+712+512N25+AT11 EXTERNAL TANK

(R81740)

ALPHAT (1) = -0.530 BETAT (5) = 0.270

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2470	.7998	.4230	.0155	-.2426	-.2893	-.3426	-.3062	-.1485	.0391	-.0376	-.1803	-.1809	-.1647	-.0864
30.000			.3842	-.0130	-.2553	-.2979	-.3396	-.2963	-.0102	.0359	-.0728	-.2186	-.2364	-.1300	-.0399
60.000			.3849	-.0152	-.2566	-.2994	-.3308	-.1389	-.0712	-.1911	-.4167	-.2303	-.0915	-.0705	-.0677
90.000		.8136	.4235	.0157	-.2421	-.2916	-.3285	-.0528	.4370		-.1661	-.2480	-.2124	-.0902	-.0848
120.000			.5138	.0956	-.1910	-.2448	-.2925	-.2263	.0861	.3530	.2196	.0959	-.0137	-.0208	-.2015
135.000							-.2443		.1959			.0362		-.0713	
150.000			.6411	.1978	-.1105	-.1673	-.2355	-.2180	.1835	.3205	.2146	-.2401	-.0915	-.2367	-.2971
165.000			.2872	-.0328	-.0982	-.1666	-.1493	.0470	.3099	.3183	.3183	-.0941	.0411	-.0292	-.1772
180.000	1.2470	1.1860	.8343	.3574	.0198	-.0482	-.1184	-.0454	.1376	.2855	.4104	.1688	.0643	-.0892	-.1296
270.000	1.2140							.6124							

X/LT .7460 .8530 .9280

PHI															
.000	-.0271	-.0574	-.0370												
30.000	-.0503	-.0597	-.0092												
60.000	-.0666	-.0536	.1320												
90.000	-.1429	-.1145													
120.000	-.1457	-.0668	.0173												
135.000	-.1767	-.0701	-.0297												
150.000	-.1816	-.0925	-.1549												
165.000	-.1595	-.0609	.1100												
180.000	-.1981	-.0581	.0080												

ALPHAT (2) = -4.380 BETAT (1) = -0.200

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.3020	.9100	.5240	.0957	-.1772	-.2280	-.2869	-.2675	-.2182	.1066	-.0002	-.1443	-.1537	-.1631	-.0808
30.000			.6252	.1777	-.1164	-.1752	-.2388	-.2228	-.0347	-.0712	-.3158	-.2334	-.0796	-.1020	-.1275
60.000			.7445	.2829	-.0354	-.0947	-.1779	-.1473	.2077	-.1342	-.4081	-.2285	-.2425	-.0226	.0316
90.000		1.2520	.8444	.3661	.0340	-.0323	-.1173	-.0964	.6420		-.4434	-.2540	-.1839	-.0626	-.0264
120.000			.8744	.3932	.0550	-.0143	-.0969	-.0627	.4605	.1093	-.2203	.2559	.2262	.1684	.0374
135.000					-.0352				.1420			.1534		.1780	
150.000			.8484	.3654	.0327	-.0346	-.1208	-.0945	.1269	.1996	.2361	.0897	.0804	.0630	.0224
165.000			.3167	-.0071	-.0727	-.1521	-.1294	-.0951	.4574	.4078	.4078	.2350	-.0422	-.0304	.0158
180.000	1.3020	1.1760	.7338	.2728	-.0459	-.1036	-.1731	-.1581	-.0996	.4810	.4013	.1743	-.0643	.0559	-.1072
270.000	.8523							.5443							

X/LT .7460 .8530 .9280

PHI

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ARC11-716 1A14 01+112+S12N05+AT11 EXTERNAL TANK (R01740)

ALPHAT(2) = -4.360 BETAT(1) = -8.200

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -0.0367 -0.0581 -0.0148  
 30.000 -0.0714 -0.0540 -0.0262  
 60.000 -0.0213 -0.0015 .1536  
 90.000 -0.0369 -0.0543  
 120.000 -0.0156 -0.0756 -0.4562  
 135.000 .0023 -0.1756 .3851  
 150.000 -0.0376 -0.1965 .2953  
 165.000 -0.0742 -0.1863 .5308  
 180.000 -0.1076 -0.1523 .3411

ALPHAT(2) = -4.340 BETAT(2) = -4.100

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PHI  
 .000 1.3390 .9528 .5472 .1031 -.1710 -.2202 -.2758 -.2498 -.1968 .1624 .0607 -.1221 -.2017 -.1358 -.0142  
 30.000 .5960 .1472 -.1375 -.1921 -.2514 -.2307 -.1212 -.1854 -.0793 -.0819 -.0807  
 60.000 .6688 .2980 -.0958 -.1484 -.2221 -.1946 .2100 .2100 .2100 .2100 .2100 .2100 .2100 .2100 .2100  
 90.000 1.1610 .7439 .2750 -.0464 -.1089 -.1800 -.1503 .6282  
 120.000 .7872 .3163 -.0136 -.0804 -.1551 -.1232 .3932 .1343 -.1822 .2237 .1297 .0737 -.0210  
 135.000 .7947 .3193 -.0096 -.0722 -.1568 -.1273 -.0022 .2265 .0278 .1340  
 150.000 .3040 -.0216 -.0866 -.1639 -.1414 -.0756 .4088 .2467 .0152 -.0431 .0076 -.0363  
 165.000 .7472 .2785 -.0370 -.1005 -.1722 -.1590 -.0161 .3997 .1860 .0138 -.0521 -.0199  
 180.000 1.3390 1.1840 .9343 .2942 .4314 .1742 -.1144 .0360 -.0448  
 270.000 .9280 .5995

X/LT .7460 .8530 .9280

PHI  
 .000 .0022 -.0145 .0132  
 30.000 -.0413 -.0185 .0664  
 60.000 -.0114 .0081 .1468  
 90.000 -.0304 .0016  
 120.000 -.0778 .0184 .3730  
 135.000 -.0644 .1276 .3170  
 150.000 -.1104 .1527 .2354  
 165.000 -.0991 .1613 .4155  
 180.000 -.0738 .1249 .2856

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TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC:1-716 IA14 Q1+T12+S12M25+AT11 EXTERNAL TANK (RB1140)

ALPHAT( 2) = -4.290 BETAT( 3) = .000

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	1.3590	.9712	.5546	.1094	-.1637	-.2155	-.2705	-.2900	-.1884	.1508	.0817	-.1061	-.1970	-.1307	-.0088
30.000			.5633	.1189	-.1545	-.2105	-.2662	-.2445	-.1455	.0659	-.0813	-.1320	-.1236	-.0931	-.0416
60.000			.9931	.1425	-.1383	-.1908	-.2599	-.2121	.2306	-.1050	-.3781	-.2171	-.0565	-.0941	-.0685
90.000		1.0660	.6417	.1873	-.1094	-.1689	-.2356	-.1808	.6325		-.4352	-.1741	-.2727	.0008	-.0607
120.000			.6925	.2341	-.0746	-.1336	-.2073	-.1924	.2203	.1937	-.1339	.2476	.0366	-.0024	-.0556
135.000							-.1735		.3281	.3281		.0004		.0393	
150.000			.7333	.2664	-.0499	-.1097	-.1914	-.1599	.1252	.2995	.2472	-.0603	-.0982	-.0014	-.1821
165.000				.2778	-.0412	-.1017	-.1778	-.1566	-.0890	.3693	.3731	.0808	.0147	.0444	-.0273
180.000	1.3590	1.1870	.7573	.2823	-.0352	-.0995	-.1743	-.1490	.0122	.3160	.4486	.1271	-.0029	.0730	-.0531
270.000		1.0660							.6126						

X/LT .7460 .8530 .9280

PHI

.000	.0207	.0724	.0313
30.000	-.0069	-.0062	.0401
60.000	.0009	.0112	.1572
90.000	-.0328	.0433	
120.000	-.1219	.0519	.2090
135.000	-.1297	.1079	.1612
150.000	-.1770	.1074	.1009
165.000	-.0842	.1145	.3132
180.000	-.1340	.1143	.2467

ALPHAT( 2) = -4.280 BETAT( 4) = 4.110

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI															
.000	1.3420	.9312	.5459	.1083	-.1624	-.2124	-.2706	-.2519	-.1962	.1370	.0803	-.1080	-.1980	-.1456	-.0148
30.000			.5199	.0855	-.1773	-.2273	-.2775	-.2555	-.0372	.0480	-.0099	-.1411	-.2288	-.1085	-.0143
60.000			.5161	.0845	-.1781	-.2263	-.2857	-.2403	.0980	-.0741	-.3243	-.2082	-.0645	-.0444	-.0840
90.000		.9597	.5422	.1091	-.1644	-.2141	-.2734	-.2295	.6374		-.4209	-.1805	-.2985	-.0080	-.0994
120.000			.5945	.1569	-.1296	-.1858	-.2509	-.2300	.1209	.2710	-.0546	.1513	-.0314	-.0373	-.1128
135.000							-.2116		.1604			.0179		-.0329	
150.000			.6598	.2075	-.0935	-.1470	-.2250	-.1975	.1815	.2808	.2016	-.2080	-.1205	-.0696	-.1959
165.000			.2494	-.0579	-.1179	-.1942	-.1733	.0196	.3227	.3227	.3325	.0078	-.0402	.0432	-.0890
180.000	1.3420	1.1830	.7477	.2802	-.0363	-.0975	-.1728	-.1352	.0204	.2978	.4316	.1155	.0348	-.0143	-.0883
270.000		1.1650							.6354						

X/LT .7460 .8530 .9280

PHI

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ARC11-716 1A14 01+712+512N25+AT11 EXTERNAL TANK (R81740)

ALPHAT ( 2 ) = -4.260 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PMI

.000 .0016 -.0171 .0161  
30.000 .0023 -.0111 .0494  
60.000 .0324 -.0136 .1280  
90.000 .0517 .0309  
120.000 -.0772 .0294 .0761  
135.000 -.0901 .0291 .0449  
150.000 -.1032 .0173 -.0408  
165.000 -.0938 .0635 .1625  
180.000 -.1246 .0848 .0631

ALPHAT ( 2 ) = -4.260 BETAT ( 5 ) = 8.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PMI

.000 1.2973 .9057 .5195 .0947 -.1783 -.2293 -.2858 -.2733 -.2237 .0729 .0148 -.1372 -.1807 -.1637 -.0886  
30.000 .4614 .0434 -.2116 -.2567 -.3081 -.2799 -.0133 .0608 -.0543 -.1845 -.2341 -.1339 -.0372  
60.000 .4455 .0242 -.2193 -.2579 -.3172 -.2809 .0478 -.0221 -.2664 -.0866 -.0892 -.0610 -.0435  
90.000 .8559 .0372 -.2116 -.2581 -.3101 -.0423 .5052 -.4148 -.2402 -.1680 -.0244 -.0942  
120.000 .5044 .0805 -.1860 -.2335 -.2943 -.2595 .0495 .3411 .0324 .0571 -.0936 -.0605 -.1915  
135.000 .5832 .1427 -.1413 -.1932 -.2663 -.2429 .1310 .2931 .1362 .2763 -.1667 -.2153 -.2679  
165.000 .2087 -.0888 -.1482 -.2217 -.2033 .1121 .2511 .2692 -.1578 -.0569 -.0580 -.1650  
180.000 1.2973 1.0650 .7268 .2617 -.0497 -.1109 -.1864 -.1249 .0900 .2242 .3499 .1107 -.0171 -.1351 -.1349  
270.000 1.2530 .6332

X/LT .7460 .8330 .9280

PMI

.000 .0399 -.0562 -.0166  
30.000 -.0176 -.0342 .0146  
60.000 -.0427 -.0446 .1150  
90.000 .0985 -.0668  
120.000 -.1195 -.0216 .0860  
135.000 -.1438 -.0201 .0287  
150.000 .0002 .0398 -.0962  
165.000 .0002 -.0201 .1340  
180.000 .0002 -.0231 .0066



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OR712+S12+S+AT11 EXTERNAL TANK (R81740)

ALPHAT ( 3 ) = -.560 BETAT ( 1 ) = -8.250

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.3110	.9975	.8084	.615	-.1245	-.1790	-.2419	-.2902	-.1986	.0410	.0310	-.1087	-.1183	-.1413	-.1035	
30.000			.7156	.2350	-.0562	-.1176	-.1857	-.1700	-.0144	.0130	-.2429	-.1555	-.0407	-.0715	-.0803	
60.000			.8113	.3357	.0102	-.0552	-.1384	-.0977	.3412	-.0290	-.2791	-.1616	-.1102	-.0717	.0226	
90.000	1.2690		.8557	.3744	.0433	-.0279	-.1110	-.0847	.6547		-.3627	-.3804	-.1944	-.1716	-.0315	
120.000			.8243	.3514	.0201	-.0463	-.1261	-.1083	.3439	.0118	-.2169	-.1099	.2189	.1871	.0838	
135.000							-.1295			.0475		.0379		.1616		
150.000			.7615	.2914	-.0287	-.0918	-.1705	-.1464	.0820	.0700	.1908	.0414	-.0420	.0276	.0406	
165.000				.2315	-.0765	-.1342	-.2076	-.1850	-.1490	.3025	.3745	.2021	-.1099	-.0337	.0311	
180.000	1.3110	1.0860	.6361	.1884	-.1092	-.1626	-.2259	-.2039	-.1558	.4232	.3745	.1388	-.1406	-.0114	-.1140	
270.000		.8574							.6482							

X/LT .7480 .8530 .9280

PHI																
.000	-.0682	-.0506	-.0102													
30.000	-.0677	-.0264	.0227													
60.000	.0156	.0350	.1501													
90.000	-.0242	-.0355														
120.000	.0098	.1783	.5572													
135.000	.0341	.2757	.4905													
150.000	-.0125	.2822	.4368													
165.000	-.0446	.2718	.5402													
180.000	-.0217	.2273	.3519													

ALPHAT ( 3 ) = -.540 BETAT ( 2 ) = -4.100

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI																
.000	1.3390	1.0470	.6365	.1814	-.1189	-.1728	-.2379	-.2199	-.1683	.2022	.1014	-.0820	-.1456	-.1362	-.0525	
30.000			.6860	.2261	-.0831	-.1442	-.2120	-.1920	-.1258	.0721	-.1186	-.1137	-.0659	-.0847	-.0863	
60.000			.7342	.2641	-.0546	-.1134	-.1947	-.1505	.3291	-.0170	-.2777	-.1788	-.0450	-.0645	-.0455	
90.000	1.1790		.7579	.2863	-.0367	-.0998	-.1771	-.1444	.5399		-.3783	-.3802	-.2088	-.1100	-.0470	
120.000			.7462	.2773	-.0454	-.1059	-.1817	-.1558	.3537	.0290	-.1199	-.1281	.1332	.0842	.0104	
135.000							-.1675			.1193		-.0212		.0967		
150.000			.7157	.2471	-.0655	-.1246	-.1998	-.1741	-.0571	.2842	.1413	-.0350	-.1573	-.0360	.0049	
165.000				.2207	-.0896	-.1484	-.2164	-.1912	-.1191	.3338	.3268	.1603	-.1002	-.0691	.0207	
180.000	1.3390	1.0940	.6458	.1968	-.1020	-.1589	-.2259	-.2070	-.0631	.2135	.3707	.1272	-.1542	-.0011	-.0523	
270.000		.9973							.6474							

X/LT .7480 .8530 .9280

SECTION (1) EXTERNAL TANK	DEPENDENT VARIABLE CP
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

	W/LT	.7480	.6930	.9290
PMI				
.000		-.0019	-.0047	.0189
30.000		-.0312	-.0069	.0549
60.000		-.0021	.0394	.1461
90.000		-.0367	.0396	
120.000		-.0520	.1376	.4230
150.000		-.0277	.2177	.3972
180.000		-.0693	.2352	.3026
210.000		-.0713	.2372	.4653
240.000		-.0660	.1997	.3031

SECTION (1) EXISTENTIAL TENSE

W/LT	.0000	.0080	.0490	.1150	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
1.3760	1.0650	.6434	.1887	-.1101	-.1674	-.2316	-.2115	-.1592	.1908	.1222	-.0633	-.1427	-.1234	-.0262	
.0000	.6434	.1887	-.1101	-.1676	-.2277	-.2095	-.1547	.0808	-.0146	-.0874	-.1325	-.0752	-.0247		
30.0000	.6434	.1900	-.1046	-.1592	-.2322	-.1886	.2660	.0109	-.2512	-.1988	-.0222	-.0237	-.0617		
80.0000	1.0810	.6484	.1970	-.1019	-.1560	-.2251	-.1750	.6504	-.3769	-.3690	-.2530	-.0831	-.0708		
90.0000	.6519	.2077	-.0997	-.1567	-.2221	-.1859	.2637	.0851	-.0759	-.1468	.0551	-.0032	-.0177		
120.0000	.5615	.2547	-.0980	-.1533	-.2304	-.1939	-.0141	.3094	.1625	-.0612	-.2079	-.0758	-.0743		
135.0000	.2027	-.0982	-.1523	-.2241	-.1994	-.1096	.2926	.3751	.0810	-.0403	-.0698	-.0187	.0103		
150.0000	.2547	-.0982	-.1523	-.2241	-.1994	-.1096	.2926	.3751	.0810	-.0403	-.0698	-.0187	.0103		
165.0000	1.0940	.6545	.2077	-.0997	-.1567	-.2221	-.1859	.2637	.0851	-.0759	-.1468	.0551	-.0032	-.0177	
180.0000	1.0810	.6484	.1970	-.1019	-.1560	-.2251	-.1750	.6504	-.3769	-.3690	-.2530	-.0831	-.0708		

1/17	.7460	.6530	.9280
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[illegible]

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OR+T12+S12M5+AT111 EXTERNAL TANK (R81740)

ALPHAT ( 3 ) = -.550 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.6300
PHI																
.000	1.3550	1.0400	.6337	.8033	-.1097	-.1644	-.2201	-.2123	-.1633	.1021	.1049	-.0746	-.1493	-.1301	-.0479	
30.000			.5873	.1416	-.1394	-.1924	-.2484	-.2304	-.1048	.1309	.0063	-.1047	-.2029	-.1029	-.0287	
60.000			.5586	.1167	-.1521	-.2016	-.2678	-.2399	.0769	.0903	-.2035	-.2201	-.0232	-.0487	-.0187	
90.000		.9745	.5529	.1144	-.1548	-.2070	-.2665	-.2181	.6513		-.3799	-.3249	-.2510	-.1187	-.1144	
120.000			.5691	.1291	-.1493	-.2004	-.2610	-.2379	.1343	.1516	-.0235	-.1503	-.0122	-.0823	-.0610	
150.000								-.2273		.2234		-.0632		-.0329		
180.000			.6065	.1553	-.1310	-.1810	-.2340	-.2186	.1439	.1637	.1637	-.2257	-.2189	-.0799	-.1635	
210.000				.1807	-.1100	-.1630	-.2351	-.2125	.0996	.2770	.2940	.0048	-.1100	-.0270	-.0590	
240.000	1.3550	1.0970	.6598	.2013	-.0939	-.1508	-.2203	-.1819	.0328	.2342	.3876	.0564	-.0275	-.0315	-.0640	
270.000		1.1010						.6365								

PHI

.000	-.0025	-.0043	.0240
30.000	-.0015	.0030	.0607
60.000	-.0030	.0265	.1354
90.000	.0045	.0322	
120.000	-.0180	.0765	.0947
150.000	-.0348	.0775	.0805
180.000	-.0451	.0635	-.0063
210.000	-.0336	.1097	.2139
240.000	-.0619	.1384	.1037

ALPHAT ( 3 ) = -.550 BETAT ( 5 ) = 6.210

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.6300
PHI																
.000	1.3140	1.0010	.6103	.1640	-.1240	-.1845	-.2484	-.2323	-.1947	.1095	.0204	-.1095	-.1418	-.1495	-.0991	
30.000			.5202	.0882	-.1792	-.2325	-.2896	-.2656	-.0117	.0565	-.0603	-.1758	-.2349	-.1071	-.0367	
60.000			.4812	.0497	-.2035	-.2464	-.3092	-.2737	.0325	.0844	-.1393	-.2177	-.0424	-.0807	-.0231	
90.000		.6704	.4650	.0392	-.2182	-.2904	-.3057	-.2648	.6556		-.3744	-.2556	-.2771	-.1241	-.1118	
120.000			.4808	.0570	-.1975	-.2432	-.2976	-.2789	-.0168	.2015	.0393	-.1158	-.0972	-.1120	-.1354	
150.000								-.2683		.0688		-.1102		-.1113		
180.000			.5333	.0960	-.1732	-.2225	-.2898	-.2615	.0982	.1733	.1154	.3092	-.2258	-.1676	-.2139	
210.000				.1404	-.1374	-.1950	-.2631	-.2431	.1133	.2116	.2480	-.1651	-.1096	-.0850	-.1804	
240.000	1.3140	1.0040	.6401	.1829	-.1086	-.1659	-.2379	-.1924	.0643	.1835	.2975	.0357	-.1152	-.1133	-.1165	
270.000		1.2730						.6663								
K/LT	.7460	.8530	.9280													

PHI

.000	-.0025	-.0043	.0240
30.000	-.0015	.0030	.0607
60.000	-.0030	.0265	.1354
90.000	.0045	.0322	
120.000	-.0180	.0765	.0947
150.000	-.0348	.0775	.0805
180.000	-.0451	.0635	-.0063
210.000	-.0336	.1097	.2139
240.000	-.0619	.1384	.1037



ARC11-716 1A14 ON-T12-S12M25-AT11 EXTERNAL TANK

(RB1740)

ALPHAT ( 3 ) = -.550 BETAT ( 5 ) = 0.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .8550 .9200

PMI

.000 -.0312 -.0476 -.0090  
 30.000 -.0170 -.0221 .0214  
 60.000 -.0163 -.0254 .1559  
 90.000 -.0281 -.0321  
 120.000 -.0738 .0253 .1647  
 135.000 -.1028 .0459 .0774  
 150.000 -.1153 .0203 -.0733  
 165.000 -.0911 .0314 .1961  
 180.000 -.1302 .0294 .0302

ALPHAT ( 4 ) = 4.070 BETAT ( 1 ) = -0.210

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0060 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6300

PMI

.000 1.3020 1.1040 .7151 .2612 -.0539 -.1152 -.1852 -.1649 -.1389 .0271 .0682 -.0570 -.0816 -.0787 -.0775  
 30.000 .8267 .3522 .0184 -.0476 -.1216 -.1047 .0745 .1176 -.1436 -.0633 .0177 .0030 -.0354  
 60.000 .8780 .3933 .0575 -.0091 -.0987 -.0613 .4757 .0846 -.1876 -.0988 .0303 .0402 .0128  
 90.000 1.2550 .8470 .3693 .0403 -.0305 -.1125 -.0493 .6458 -.3066 -.1839 -.0873 -.1575 -.1653  
 120.000 .7481 .2864 -.0336 -.0962 -.1689 -.1557 .2213 -.1263 -.3038 -.3391 .0810 .1429 .1322  
 135.000 .6487 .1977 -.0982 -.1580 -.2296 -.2074 .0341 -.0580 .1387 -.0525 -.1714 -.0399 .0650  
 150.000 .1322 -.1445 -.1989 -.2642 -.2430 -.1905 .2117 .3345 .1684 -.1646 -.0574 .0715  
 165.000 .5308 .1015 -.1715 -.2219 -.2745 -.1965 .2975 .3615 .1014 .1681 -.1694 -.0835  
 180.000 .9732 .5501 .6254

K/LT .7400 .8550 .9200

PMI

.000 -.0797 -.0377 -.0216  
 30.000 -.0320 .0066 .0167  
 60.000 .0017 .0675 .0888  
 90.000 -.1149 -.1036  
 120.000 .0610 .2913 .6787  
 135.000 .1090 .3784 .6133  
 150.000 .0775 .3659 .5561  
 165.000 .0640 .3511 .5753  
 180.000 .0665 .2954 .5563

DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI14A - VOL. 9

PAGE 4841

ARC11-71.5 IAI14 OL+T12+S12M23+AT11 EXTERNAL TANK

(R01140)

ALPHAT (4) = 4.000 BETAT (2) = -4.100

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LY	.0000	.0000	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5050	.5360
PHI														
.000	1.3430	1.1370	.7444	.2741	-.0414	-.1020	-.1745	-.1609	-.1249	.2035	.1396	-.0197	-.0616	-.0217
50.000			.7863	.3103	-.0117	-.0779	-.1521	-.1332	-.0729	.1544	-.0353	-.0415	-.0202	-.0202
60.000			.7880	.3106	-.0147	-.0771	-.1561	-.1272	.4037	.1060	-.1889	-.1247	.0419	.0237
90.000		1.1370	.7416	.2759	-.0471	-.1062	-.1789	-.1212	.6332		-.3206	-.1920	-.0323	-.1162
120.000			.6675	.2125	-.0948	-.1934	-.2176	-.1983	.2108	-.1168	-.2831	-.3599	-.0179	.0693
135.000								-.2166		-.0272		-.1237		.0094
150.000			.6099	.1586	-.1315	-.1867	-.2523	-.2249	-.0938	.1408	.1534	-.0867	-.2290	-.0968
165.000			.1229	-.1561	-.2102	-.2706	-.2405	-.1479	.2335	.3054	.1356	-.2295	-.1765	.0374
180.000	1.3430	.9706	.5441	.1034	-.1688	-.2185	-.2764	-.2500	.0362	.1679	.3662	.0637	-.1475	-.2326
270.000		.9329						.6109						.0279

X/LY .7460 .6530 .9280

PHI

.000	-.0307	.0091	.0568
30.000	-.0147	.0261	.0618
60.000	-.0107	.0591	.0816
90.000	-.0912	-.0695	
120.000	-.0144	.2014	.5379
135.000	-.0367	.2960	.4698
150.000	-.0196	.3095	.4321
165.000	-.0355	.3120	.4038
180.000	-.0561	.2665	.3130

ALPHAT (4) = 4.010 BETAT (3) = .000

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LY	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5360
PHI														
.000	1.3650	1.1730	.7543	.2784	-.0368	-.0980	-.1741	-.1580	-.1120	.2230	.1637	-.0091	-.0859	-.0104
30.000			.7359	.2617	-.0492	-.1119	-.1803	-.1605	-.0533	.1042	.0669	-.0262	-.0814	-.0387
60.000			.6495	.2286	-.0728	-.1297	-.2054	-.1831	.1513	.1437	-.1726	-.1213	.0192	.0011
90.000		1.0620	.6406	.1857	-.1074	-.1637	-.2273	-.2079	.6140		-.3399	-.2079	.0154	-.0414
120.000			.5920	.1476	-.1342	-.1820	-.2486	-.2017	.2510	-.0911	-.2429	-.2869	-.0039	.0299
135.000								-.2172		.1147		-.1710		-.0414
150.000			.5696	.1261	-.1525	-.2016	-.2662	-.2273	-.0254	.2157	.1692	-.1310	-.2322	-.1296
165.000			.1205	-.1572	-.2060	-.2702	-.2441	.0754	.2754	.2352	.3458	.1029	-.0970	-.1468
180.000	1.3650	.9764	.5551	.1160	-.1592	-.2095	-.2715	-.2378	.0531	.1957	.3678	.0116	-.0803	-.2422
270.000		1.0700						.6232						.0379

X/LY .7460 .6530 .9280

PHI

DATE 06 JAN 78

TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RBL740)

ARC11-716 1A14 CR-T18-S18MS-WAT11 EXTERNAL TANK

ALPHAT (4) = 4.010 BETAY (3) = .000

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .0530 .9200

PMI	0.000	-.0040	.0000	.0533
30.000	.0036	.0363	.0923	
60.000	-.0114	.0333	.1147	
90.000	-.0419	.0520		
120.000	-.0112	.1500	.3171	
150.000	.0066	.2142	.2702	
180.000	-.0122	.2194	.1775	
195.000	.0323	.2297	.3329	
199.000	.0368	.2259	.2397	

ALPHAT (4) = 4.040 BETAY (4) = 4.110

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0060 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4310 .5130 .5960 .6360

PMI	0.000	1.3440	1.1500	.7419	.2750	-.0360	-.1009	-.1711	-.1572	-.1180	.1326	.1461	.0899	-.0847	-.0197	
30.000				.6687	.2118	-.0658	-.1464	-.1109	-.1730	-.1223	.2115	.0692	-.0681	-.1204	-.0708	-.0292
60.000				.5955	.1516	-.1326	-.1835	-.2524	-.2000	.2017	.1636	-.1384	-.1247	-.0031	-.0744	-.0309
90.000			.3999	.5463	.1100	-.1630	-.2057	-.2722	-.2393	.6195		-.1400	-.1762	.0179	-.0844	-.0808
120.000				.5155	.0906	-.1756	-.2240	-.2772	-.2323	.1712	.0025	-.1674	-.2338	-.0234	-.0656	-.0072
135.000				.5204	.0991	-.1741	-.2216	-.2852	-.2448	.0959	.1613	.1838	-.2189	-.2668	-.1494	-.0500
150.000					.1006	-.1694	-.2179	-.2767	-.2511	.0964	.2310	.2605	.0215	-.1363	-.1690	.0237
165.000		1.3440	.9798	.5555	.1141	-.1578	-.2107	-.2719	-.2348	.0360	.1731	.3534	.0098	-.0612	-.1748	.0070
199.000			1.1720							.6412						

K/LT .7400 .0530 .9200

PMI	0.000	-.0137	.0095	.0554
30.000	-.0037 <td>.0157 <td>.0709</td> <td></td> </td>	.0157 <td>.0709</td> <td></td>	.0709	
60.000	-.0022 <td>.0200</td> <td>.1163</td> <td></td>	.0200	.1163	
90.000	.0073 <td>.0430</td> <td></td> <td></td>	.0430		
120.000	.0462 <td>.1370</td> <td>.1290</td> <td></td>	.1370	.1290	
150.000	.0370	.1379	.1106	
180.000	.0210	.1230	.0292	
195.000	.0332	.1570	.2293	
199.000	.0222	.1919	.1021	

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14 - VOL. 9

ARC11-716 IA14 OI+T12+S.2N25+AT11 EXTERNAL TANK (RB1740)

ALPHA\*( 4 ) = 4.000 BETAT ( 5 ) = 9.240

SECTION : 1)EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2990	1.1080	.7193	.2623	-.0497	-.1111	-.1872	-.1686	-.1408	.0802	.0330	-.0570	-.0889	-.0939	-.0939	-.0789
30.000			.5941	.1567	-.1328	-.1875	-.2520	-.2358	-.0929	.1464	.0310	-.1003	-.1492	-.0942	-.0364	
60.000			.5020	.0728	-.1902	-.2357	-.2895	-.2504	.0798	.1956	-.0601	-.1376	-.0373	-.0794	-.0477	
90.000		.8542	.4359	.0362	-.2107	-.2548	-.3035	-.2433	.6298		-.3297	-.0992	.0510	-.1023	-.0449	
120.000			.4425	.0260	-.2169	-.2619	-.3113	-.2784	.0511	.0515	-.1068	-.2007	-.0553	-.1030	-.0656	
135.000							-.2779			.1474		-.1422		-.1156		
150.000			.4649	.0402	-.2075	-.2520	-.3148	-.2789	.0592	.1294	.1294	-.2937	-.2563	-.1963	-.1510	
165.000				.0675	-.1914	-.2117	-.3023	-.2804	.0592	.1891	.2413	-.1207	-.1391	-.1133	-.0900	
180.000	1.2990	.8979	.5294	.0931	.1724	-.2226	-.2880	-.2692	.0235	.1539	.2421	-.0042	-.1386	-.0958	-.0802	
270.000		1.2560							.6538							

X/LT .7480 .8530 .9280

PMI																
.000	-.0769	-.0393	-.0083													
30.000	-.0257	-.0093	.0381													
60.000	-.0287	-.0016	.1437													
90.000	-.0215	.0591														
120.000	.0087	.1030	.1564													
150.000	-.0136	.1110	.1100													
180.000	-.0373	.0895	-.0587													
210.000	-.0010	.0990	.2944													
240.000	-.0431	.0915	.0631													

ALPHA\*( 5 ) = 8.120 BETAT ( 1 ) = -8.220

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2580	1.1920	.8170	.3472	.0177	-.0498	-.1241	-.1095	-.0818	.0755	.0995	-.0014	-.0203	-.0203	-.0298	
30.000			.9250	.4404	.0941	.0219	-.0622	-.0413	.1443	.1913	-.0566	-.0062	.0507	.0480	.0249	
60.000			.9240	.4441	.0966	.0277	-.0683	-.0366	.5392	.1712	-.1643	-.0119	.0593	.0738	.0499	
90.000		1.2140	.8223	.3534	.0249	-.0431	-.1259	-.0756	.6100		-.2922	-.1149	-.0114	.0574	.0995	
120.000			.6649	.2201	-.0841	-.1442	-.2169	-.1747	.0959	-.2762	-.3190	-.2427	-.0360	.0630	.1141	
								-.2391		-.2152		-.2206		.0690		
150.000			.5475	.1176	-.1651	-.2167	-.2846	-.2677	.0746	-.1954	.0264	-.0990	-.1545	-.0182	.0735	
180.000				.0509	-.2085	-.2557	-.3170	-.2833	-.1911	.1261	.2101	.1348	-.1760	-.0340	.0780	
210.000	1.2580	.8633	.4371	.0244	-.2269	-.2706	-.3176	-.2776	-.1483	.2411	.3313	.0610	-.1933	-.1067	-.0039	
270.000		.8076							.5037							

X/LT .7480 .8530 .9280

PMI

ARC11-716 IAI4 01+12+S12N2S+AT11 EXTERNAL TANK

(R81740)

ALPHAT ( 5 ) = 8.120 BETAT ( 1 ) = -8.220

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9280

PHI

.000	-.0478	-.0431	.0051
30.000	.0209	.0461	.0636
60.000	.0504	.1368	.1433
90.000	.1091	.1152	
120.000	.1156	.2434	.8047
135.000	.1337	.3553	.5867
150.000	.1350	.3631	.5722
165.000	.1335	.3416	.5957
180.000	.1343	.2935	.3588

ALPHAT ( 5 ) = 8.100 BETAT ( 2 ) = -4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.3020	1.2460	.8459	.3657	.023	-.0340	-.1112	-.0973	-.0693	.1978	.1818	.0369	-.0243	-.0062	.0120
30.000			.8758	.3897	.0550	-.0124	-.0936	-.0789	.0299	.1928	.0410	-.0020	.0367	.0309	.0278
60.000			.8272	.3485	.0223	-.0434	-.1317	-.1101	.4290	.1930	-.1943	-.0218	.0849	.0590	.0215
90.000		1.1180	.7175	.2626	-.0544	-.1156	-.1906	-.1395	.5949	-.3009	-.3009	-.0786	.0003	.0210	.0433
120.000			.5934	.1565	-.1342	-.1893	-.2560	-.2125	.0996	-.2784	-.3231	-.2538	-.0311	.0393	.0826
135.000								-.2342		-.1711		-.2650		.0135	
150.000			.5180	.0816	-.116	-.2320	-.2960	-.2661	-.0524	.0107	.0791	-.1739	-.2097	-.0664	.0619
165.000				.0475	-.2072	-.2533	-.3086	-.2593	-.0638	.2118	.2571	.1187	-.2890	-.0863	.0669
180.000			.4566	.0348	-.2159	-.2580	-.3126	-.2525	-.0025	.1582	.3347	-.0035	-.1754	-.0413	.0391
275.000			.9163												.5774

X/LT .7400 .8530 .9280

PHI

.000	-.0191	.0160	.0707
30.000	.0100	.0494	.0859
60.000	.0077	.0879	.0985
90.000	.023	.0714	
120.000	.0581	.2248	.4926
135.000	.0799	.3082	.4736
150.000	.0694	.3150	.4435
165.000	.0915	.3157	.4984
180.000	.1032	.2756	.3155

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TABULATED PRESSURE DATA - IAL14A - VOL. 9

PAGE 4845

ARC11-716 IAL14 C4+T12+S12+S+AT11 EXTERNAL TANK

(RB1740)

ALPHAT ( 5 ) = 8.040 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3200	1.2620	.8547	.3737	.0366	-.0288	-.1103	-.0921	-.0582	.1378	.2405	.0594	-.0274	-.0146	.0301
30.000			.6175	.3398	.0125	-.0558	-.1334	-.1106	-.0612	.2265	.1256	-.0019	-.0231	.0029	.0081
60.000			.7238	.2807	-.0317	-.1108	-.1846	-.1480	.3431	.2265	-.1726	-.0317	.0577	.0282	.0026
90.000		1.0140	.6128	.1672	-.1188	-.1743	-.2395	-.2139	.5868		-.2948	-.1281	.0252	.0041	.0223
120.000			.5236	.0961	-.1743	-.2236	-.2771	-.2359	.1174	-.2340	-.3085	-.2570	-.0256	.0008	.0431
135.000								-.2479	-.0014	-.0014		-.2514		-.0232	
150.000			.4859	.0584	-.1981	-.2444	-.2994	-.2525	.0610	.0945	.1236	-.2090	-.2420	-.0790	.0221
165.000			.0471	-.2058	-.2521	-.3067	-.2895	.0663	.1493	.3117	.0899	-.1235	-.1087	.0616	
180.000	1.3200	.8894	.4637	.0421	-.2068	-.2543	-.3054	-.2575	.0555	.1461	.3467	-.0214	-.0881	-.1706	.0639
270.000	1.0290								.5923						

K/LT .7460 .8330 .9280

PHI

.000	.0071	.0320	.0903
30.000	.0074	.0535	.1003
60.000	.0094	.0757	.1068
90.000	.0334	.0987	
120.000	.0651	.1877	.2839
135.000	.0709	.2364	.2641
150.000	.0513	.2334	.1795
165.000	.0940	.2449	.3653
180.000	.1022	.2419	.2557

ALPHAT ( 5 ) = 8.150 BETAT ( 4 ) = 8.300

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2560	1.1980	.8199	.3512	.0258	-.0412	-.1229	-.1062	-.0788	.0603	.0843	-.0012	-.0272	-.0277	-.0262
30.000			.6579	.2151	-.0880	-.1469	-.2139	-.1987	-.1616	.2098	.0845	-.0427	-.0641	-.0643	-.0697
60.000			.5125	.0891	-.1810	-.2310	-.2930	-.2418	.1277	.2805	-.0297	.0208	-.0357	-.0481	-.0538
90.000		.8060	.4237	.0162	-.2285	-.2745	-.2637	-.2569	.5391		-.3176	-.2984	-.0159	-.0956	-.0409
120.000			.3841	-.0117	-.2416	-.2820	-.2744	-.2732	.0331	-.1173	-.2681	-.2280	-.0757	-.0629	-.0267
135.000								-.2642	.1005			-.1911		-.0752	
150.000			.3831	-.0135	-.2397	-.2792	-.3296	-.2767	.0303	.1555	.0988	-.3009	-.2317	-.1087	-.0981
165.000			.0052	-.2337	-.2768	-.3286	-.3043	.0338	.1498	.2118	.0992	-.1747	-.0755	-.0377	-.0377
180.000	1.2560	.7754	.4301	.0184	-.2221	-.2695	-.3259	-.3143	.0033	.1078	.1545	-.0840	-.1350	-.0810	-.0499
270.000	1.2190								.6171						

K/LT .7460 .8330 .9280

PHI

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(R81740)

ARC11-716 1A14 CR+T12+S12N25+AT11 EXTERNAL TANK

ALPHAT ( 5 ) = 0.150 BETAT ( 4 ) = 0.300

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .6530 .9280

PMI	0.000	-.0487	-.0495	.0108
30.000	-.0823	-.0272	.0459	
60.000	-.0132	.0160	.1355	
90.000	.0076	.0954		
120.000	.0438	.1333	.1435	
150.000	.0291	.1390	.1218	
180.000	.0125	.1146	-.0495	
165.000	.0380	.1216	.3079	
180.000	.0108	.1365	.0734	



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 0047

AHC11-716 IA14 OR+T12+S12N25

EXTERNAL TANK

(RB1741) ( 14 FEB 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 LREF = 36.7090 INCHES YMRP = .0000 INCHES  
 BREF = 36.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT(1) = -6.260 BETAT(1) = -.010

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0060	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5990	.6380
PHI	.9309	.4648	.0488	-.3430	-.3999	-.3540	-.2491	-.1352	-.0986	-.1282	-.1290	-.0958	-.0802	-.0481	-.0444
30.000	.0806	-.3279	-.4007	-.3637	-.2497	-.1452	-.1274	-.1847	-.2106	-.1139	-.0719	-.0719	-.0719	-.0719	-.0719
60.000	.1197	-.2892	-.3589	-.3206	-.2253	-.1402	-.12134	-.3691	-.3288	-.1192	-.0341	-.0341	-.0341	-.0341	-.0341
90.000	.2252	-.1900	-.2819	-.2240	-.0812	.0703	.0970	-.6324	-.3983	-.1660	-.1120	-.0924	-.0924	-.0924	-.0924
120.000	.3603	-.0682	-.2093	-.1824	-.0527	.0914	.2023	.0131	-.0358	-.0830	-.0814	-.0568	-.0433	-.0433	-.0433
135.000						.0626		.0824		-.0895					
150.000	.4593	.0216	-.1633	-.1905	-.0840	.0581	.1371	.1835	-.1308	-.1438	-.1921	-.1683	-.1683	-.1683	-.1683
165.000		.0612	-.1394	-.1305	-.0483	.0596	.1425	.2303	.0115	-.1183	-.1476	-.1152	-.0712	-.0712	-.0712
180.000	.9309	.9280	.5295	.0703	-.1311	-.1246	-.0346	.0538	.1514	.2229	.0633	-.1266	-.1526	-.1060	-.0611
270.000		.6328													.0919

X/LT .7480 .8330 .9280

## PHI

.0000 -1.192 -1.4582  
 30.000 -1.0700 -1.1150 -1.4004  
 60.000 -1.0389 -1.0943 -1.3131  
 90.000 -1.1059 -1.1209  
 120.000 -1.0700 -1.1914 -1.3602  
 135.000 -1.0801 -1.2183 -1.3935  
 150.000 -1.1775 -1.3296 -1.2944  
 165.000 -1.0875 -1.2405 -1.4209  
 180.000 -1.0822 -1.2265 -1.4274

ALPHAT(1) = -6.270 BETAT(2) = 4.070

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0060	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5990	.6380
PHI	.9049	.4398	.0398	-.3491	-.4109	-.3748	-.2584	-.1475	-.1120	-.1389	-.1454	-.1127	-.0767	-.0683	-.0683
30.000	.0901	-.3544	-.3955	-.3420	-.2246	-.1129	-.0892	-.1537	-.1951	-.1109	-.0541	-.0541	-.0541	-.0541	-.0541
60.000	.0433	-.3323	-.3624	-.3048	-.1897	-.0923	-.1546	-.3193	-.2616	-.1186	-.0461	-.0461	-.0461	-.0461	-.0461
90.000	.5146	.1051	-.1200	-.3158	-.2481	-.0908	.0721	.1157	-.1410	-.3670	-.1480	-.0952	-.0710	-.0710	-.0710
120.000	.2349	-.1198	-.2771	-.2346	-.1014	.0587	.1693	-.0017	-.0392	-.1215	-.1058	-.0837	-.0709	-.0709	-.0709
135.000						.0221		.0376		-.1371					
150.000	.3539	-.0711	.2278	-.2109	-.1203	.0100	.0955	.1100	-.2871	-.3588	-.3148	-.2521	-.1954	-.1954	-.1954



(R81741)

EXTERNAL TANK

ARC11-716 1A14 OL+712+912M25

ALPHAT ( 1 ) = -0.870 BETAT ( 2 ) = 4.070

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
165.000				.0119	-.1729	-.1667	-.0814	.0209	.1097	.1852	-.0459	-.1557	-.1672	-.1241	-.1028
180.000	.9049	.9202	.5155	.0627	-.1348	-.1347	-.0454	.0499	.1372	.1999	.0517	-.1324	-.1633	-.1483	-.1022
270.000		.7390						.0772							

X/LT .7480 .8330 .9280

PHI

.000	-.0736	-.1319	-.4598
30.000	-.0664	-.1155	-.4518
60.000	-.0644	-.0940	-.3338
90.000	-.0839	-.1203	
120.000	-.1004	-.2202	-.3747
135.000	-.1149	-.2443	-.3679
150.000	-.2352	-.3637	-.3305
165.000	-.1184	-.2572	-.3844
180.000	-.1261	-.2574	-.4377

ALPHAT ( 1 ) = -0.290 BETAT ( 3 ) = 8.170

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
.000	.8392	.7761	-.0020	-.3865	-.4481	-.4040	-.2955	-.1890	-.1489	-.1705	-.1750	-.1405	-.1120	-.0982	-.0886
30.000			-.0358	-.3894	-.3976	-.3427	-.2143	-.1004	-.0752	-.1415	-.1833	-.1111	-.0710	-.0709	-.0747
60.000			-.0329	-.3791	-.3548	-.2955	-.1619	-.0588	-.1014	-.2853	-.6223	-.1229	-.0569	-.0560	-.0626
90.000		.3887	.0010	-.3556	-.3393	-.2565	-.0895	.0762	.1355	-.6409	-.3193	-.1224	-.0780	-.0667	
120.000			.1047	-.2801	-.3434	-.2885	-.1436	.0284	.1750	-.0237	-.1250	-.1595	-.1519	-.1376	-.1291
135.000								-.0318		-.0190		-.2221		-.1872	
150.000			.2469	-.1673	-.3026	-.2756	-.1787	-.0560	.0393	.0186	-.3828	-.4997	-.4473	-.3218	-.2648
165.000				-.0568	-.2375	-.2202	-.1388	-.0353	.0487	.0946	-.1298	-.2209	-.2410	-.2270	-.1634
180.000	.8392	.8045	.4784	.0265	-.1762	-.1656	-.0809	.0089	.0958	.1446	.0139	-.1799	-.2738	-.2362	-.1816
270.000		.8265						.0760							

X/LT .7480 .8330 .9280

PHI

.000	-.1076	-.1572	-.5069
30.000	-.1099	-.1448	-.4664
60.000	-.1075	-.1098	-.3437
90.000	-.1066	-.1568	
120.000	-.1477	-.2508	-.3796
135.000	-.1539	-.2690	-.3925
180.000	-.2887	-.4162	-.3734



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(R81741)

EXTERNAL TANK

ARC11-716 1A14 CR+T12+S12M25

ALPHAT( 1 ) = -8.250 BETAT ( 3 ) = 8.170

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7480 .8530 .9280

PHI

185.000 -.1742 -.2893 -.4132  
180.000 -.2096 -.3243 -.4816

ALPHAT( 2 ) = -4.310 BETAT ( 1 ) = -8.130

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .0000 .0580 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 .9196 .5164 .1249 -.2968 -.4073 -.3833 -.2808 -.1761 -.1377 -.1582 -.1451 -.1292 -.1121 -.1012 -.0956  
30.000 .2326 -.2036 -.3790 -.3631 -.2808 -.1917 -.1964 -.2380 -.1873 -.1419 -.1257 -.1095 -.0970  
60.000 .3705 -.0825 -.2680 -.2551 -.1787 -.1011 -.1988 -.4235 -.4021 -.0811 -.0324 -.0498 -.0510  
90.000 .4937 .0378 -.1325 -.1069 .0108 .1415 .2022 -.1258 -.0946 -.0274 -.0439 -.0448  
120.000 .5428 .0904 -.1058 -.0933 .0052 .1160 .1520 -.0293 .0412 .0379 .0065 -.0019 .0095  
135.000 .5055 .0522 -.1437 -.1355 -.0639 .0452 .1025 .2363 .1127 -.0406 -.1419 -.1310 -.0862  
150.000 .5096 -.1953 -.1903 -.1032 .0030 .0879 .2062 .0896 -.0309 -.1210 -.1171 -.0522  
165.000 .9196 .8199 .3741 -.0665 -.2330 -.2168 -.1167 -.0144 .0682 .1715 .0216 -.1440 -.1773 -.1579 -.1036  
270.000 .4632 .2441

K/LT .7480 .8530 .9280

PHI

.000 -.1080 -.1632 -.5183  
30.000 -.0983 -.1358 -.4971  
60.000 -.0649 -.0852 -.2659  
90.000 -.0750 -.1158  
120.000 .0145 -.0669 -.3003  
135.000 .0113 -.0913 -.3942  
150.000 -.0701 -.1882 -.1858  
165.000 -.0333 -.1529 -.4342  
180.000 -.0723 -.1788 -.4542

(RB1741)

EXTERNAL TANK

ARC11-716 1A14 CL+T12+312M25

ALPHAT ( 2 ) = -4.290 BETAT ( 2 ) = -4.080

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9818	.5770	.1566	-.2711	-.3044	-.3574	-.2487	-.1404	-.1061	-.1245	-.1181	-.0968	-.0723	-.0634	-.0570
30.000			.2101	-.2241	-.3656	-.3483	-.2473	-.1334	-.1427	-.1995	-.1556	-.1095	-.0990	-.0880	-.0881
60.000			.2956	-.1465	-.2902	-.2685	-.1758	-.0670	-.1657	-.4089	-.4011	-.1124	-.0615	-.0381	-.0478
90.000		.8035	.3854	-.0615	-.1993	-.1545	-.0198	.1315	.1991		-.1402	-.0183	-.0412	-.0499	-.0428
120.000			.4477	-.0015	-.1631	-.1400	-.0301	.0967	.1486	-.0311	-.0014	-.0053	-.0423	-.0428	-.0285
135.000								.0801		.0808		-.0363		-.0549	
150.000			.4580	.0067	-.1769	-.1612	-.0726	.0394	.1062	.2090	.0549	-.0304	-.1412	-.1428	-.1005
165.000				-.0185	-.1946	-.1804	-.0894	.0202	.1068	.2132	.0757	-.0717	-.1374	-.1083	-.0542
180.000		.9818	.8399	-.0474	-.2069	-.1963	-.0932	.0188	.0997	.1152	.0582	-.1269	-.1316	-.1289	-.0792
270.000		.5834							.2218						

X/LT .7480 .8530 .9280

PHI

.000	-.0674	-.1224	-.4758
30.000	-.0707	-.1074	-.4733
60.000	-.0562	-.0771	-.2795
90.000	-.0524	-.0703	
120.000	-.0273	-.1053	-.3217
135.000	-.0255	-.1347	-.3625
150.000	-.0977	-.2245	-.1994
165.000	-.0468	-.1706	-.3976
180.000	-.0618	-.1882	-.4230

ALPHAT ( 2 ) = -4.290 BETAT ( 2 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9999	.5904	.1583	-.2635	-.3703	-.3476	-.2391	-.1302	-.0953	-.1120	-.1034	-.0820	-.0611	-.0548	-.0468
30.000			.1795	-.2515	-.3591	-.3322	-.2241	-.1231	-.1062	-.1621	-.1342	-.0939	-.0702	-.0631	-.0539
60.000			.2133	-.2170	-.3098	-.2742	-.1698	-.0640	-.1290	-.3812	-.3907	-.1373	-.0723	-.0498	-.0471
90.000		.6867	.2704	-.1567	-.2465	-.1911	-.0418	.1228	.2064		-.1043	-.0268	-.0486	-.0537	-.0480
120.000			.3414	-.0952	-.2202	-.1831	-.0566	.0779	.1479	-.0613	-.0384	-.0545	-.0785	-.0886	-.0459
135.000								.0451		.0496		-.0847		-.0823	
150.000			.3947	-.0531	-.2138	-.1931	-.0921	.0273	.1000	.1644	-.1209	-.1069	-.1903	-.1724	-.1482
165.000				-.0366	-.2026	-.1908	-.0903	.0205	.1065	.2041	.0179	-.1089	-.1450	-.1192	-.0711
180.000		.9999	.8415	-.0381	-.2017	-.1884	-.0817	.0262	.1154	.1973	.0630	-.1211	-.1497	-.1095	-.0575
270.000		.6958							.2005						

X/LT .7480 .8530 .9280

PHI

.000	-.0674	-.1224	-.4758
30.000	-.0707	-.1074	-.4733
60.000	-.0562	-.0771	-.2795
90.000	-.0524	-.0703	
120.000	-.0273	-.1053	-.3217
135.000	-.0255	-.1347	-.3625
150.000	-.0977	-.2245	-.1994
165.000	-.0468	-.1706	-.3976
180.000	-.0618	-.1882	-.4230

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(R81741)

EXTERNAL TANK

ARC11-716 1A14 CR+T12+S12N25

ALPHAT ( 2 ) = -4.290 BETAT ( 3 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .8530 .9280

PHI  
 .000 -.0539 -.1100 -.4655  
 30.000 -.0490 -.0997 -.4361  
 60.000 -.0533 -.0770 -.3159  
 90.000 -.0510 -.0790  
 120.000 -.0474 -.1362 -.3209  
 135.000 -.0539 -.1621 -.3459  
 150.000 -.1380 -.2632 -.2534  
 165.000 -.0670 -.1842 -.3719  
 180.000 -.0578 -.1768 -.3898

ALPHAT ( 2 ) = -4.180 BETAT ( 4 ) = 4.070

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 .9789 .5735 .1538 -.2720 -.3834 -.3587 -.2515 -.1419 -.1082 -.1279 -.1109 -.0926 -.0799 -.0663 -.0591  
 30.000 .1225 -.2884 -.3670 -.3276 -.2179 -.1051 -.0811 -.1417 -.1262 -.0897 -.0719 -.0607 -.0553  
 60.000 .1213 -.2790 -.3272 -.2738 -.1531 -.0368 -.0806 -.3431 -.3548 -.1470 -.0866 -.0643 -.0529  
 90.000 .5826 .1510 -.2462 -.2812 -.2123 -.0468 .1264 .2296 -.1168 -.0258 -.0499 -.0629 -.0603  
 120.000 .2222 -.1926 -.2733 -.2293 -.0860 .0616 .1486 -.0735 -.0714 -.0835 -.0987 -.0830 -.0655  
 135.000 .3060 -.1293 -.2633 -.2334 -.1251 .0036 .0803 .1066 -.0121 -.1153 -.1174  
 150.000 -.0801 -.2381 -.2164 -.1204 -.0046 .0842 .1660 -.0401 -.2463 -.3180 -.3308 -.2484 -.1754  
 165.000 .9789 .6375 .4073 -.0485 -.2176 -.1989 -.0973 .1007 .1740 .0519 .1323 .1592 .1515 .0969  
 180.000 .6044  
 270.000 .7480 .8530 .9280

PHI  
 .000 -.0714 -.1223 -.4757  
 30.000 -.0570 -.1036 -.4513  
 60.000 -.0328 -.0782 -.3244  
 90.000 -.0593 -.0985  
 120.000 -.0737 -.1672 -.3265  
 135.000 -.0906 -.1866 -.3464  
 150.000 -.1824 -.3010 -.2936  
 165.000 -.0906 -.2024 -.3578  
 180.000 -.0947 -.2104 -.4203

ARC11-716 IAI4 CL+T12+SI2425 (RB1741)

ALPHAT ( 2 ) = -4.190 BETAT ( 3 ) = 0.140

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PMI															
.000	.9117	.9062	.1139	-.3067	-.4163	-.3905	-.2851	-.1822	-.1443	-.1587	-.1461	-.1322	-.1148	-.1022	-.0980
30.000			.0408	-.3387	-.3911	-.3466	-.2195	-.1063	-.0710	-.1378	-.1250	-.1016	-.0860	-.0766	-.0793
60.000			.0273	-.3325	-.3364	-.2725	-.1366	-.0168	-.0396	-.3100	-.3165	-.1566	-.0952	-.0702	-.0693
90.000		.4569	.0427	-.3149	-.3047	-.2198	-.0430	.1345	.2476	-.0745	-.0398	-.0699	-.0892	-.0862	
120.000			.1066	-.2772	-.3194	-.2620	-.1095	.0472	.1467	-.0877	-.0961	-.1157	-.1343	-.1271	-.1195
150.000			.1965	-.2156	-.3168	-.2798	-.1722	-.0391	.0439	-.0344	-.3545	-.4410	-.4064	-.3031	-.2413
165.000			.1408	-.2857	-.2561	-.1590	-.0517	.0359	.0850	-.1181	-.2058	-.2270	-.2101	-.1501	
180.000	.9117	.7289	.3673	-.0813	-.2435	-.2219	-.1248	-.0310	.0630	.1130	.0125	-.1722	-.2585	-.2310	-.1666
270.000		.8927													
K/LT	.7480	.6530	.9280												

PMI

.000	-.1145	-.1660	-.5133
30.000	-.0813	-.1208	-.4332
60.000	-.0648	-.0924	-.3180
90.000	-.1042	-.1704	
120.000	-.1204	-.1950	-.3218
150.000	-.1207	-.2159	-.3664
170.000	-.2429	-.3506	-.3467
185.000	-.1370	-.2359	-.4042
180.000	-.1693	-.2781	-.4681

ALPHAT ( 3 ) = -.480 BETAT ( 1 ) = -0.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PMI															
.000	.9416	.6210	.2287	-.2184	-.3693	-.3497	-.2608	-.1561	-.1221	-.1368	-.1284	-.1163	-.1075	-.1007	-.0931
30.000			.3436	-.1110	-.3092	-.2971	-.2195	-.1364	-.1322	-.1815	-.1388	-.1078	-.0948	-.0898	-.0771
60.000			.4535	-.0069	-.1935	-.1844	-.1060	-.0195	-.0794	-.3285	-.2291	-.1081	-.0430	-.0271	-.0184
90.000		.9140	.5107	.0547	-.1213	-.0896	.0283	.1661	.2447	-.1559	-.0035	.0093	-.0197	-.0234	-.0178
120.000			.4817	.0315	-.1486	-.1367	-.0449	.0572	.0669	-.1140	.0227	.0365	-.0032	-.0068	.0077
150.000			.4063	-.0392	-.2181	-.2055	-.1263	.0107	.0410	.0332	.0824	.0511	-.1393	-.1166	-.0751
165.000			-.1075	-.2658	-.2476	-.1517	-.0406	.0437	.1756	.1975	.0697	-.0210	-.1181	-.1122	-.0444
180.000	.9416	.7241	.2688	-.1585	-.2908	-.2634	-.1493	-.0367	.0372	.1524	.0216	-.1382	-.1687	-.1309	-.0901
270.000		.4832													
K/LT	.7480	.6530	.9280												

PMI

DATE 08 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4833

ARC11-716 IA14 OL+12+S12+25

EXTERNAL TANK

(981741)

ALPHAT (3) = -.480 BETAT (1) = -8.150

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LY .7400 .8530 .9280

741  
.000 -.1039 -.1592 -.3061  
30.000 -.0795 -.1142 -.4791  
60.000 -.0247 -.0374 -.2512  
90.000 -.0132 -.0297  
120.000 .0310 -.0282 -.3014  
135.000 .0366 -.0494 -.3793  
150.000 -.0400 -.1615 -.1893  
165.000 -.0035 -.1182 -.4345  
180.000 -.0421 -.1449 -.4997

ALPHAT (3) = -.480 BETAT (2) = -4.090

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LY .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380  
741  
.000 1.0080 .6855 .2643 -.1901 -.3390 -.3211 -.2262 -.1204 -.0869 -.1013 -.0957 -.0800 -.0641 -.0598  
30.000 .3195 -.1362 -.3115 -.2945 -.2039 -.1051 -.0927 -.1512 -.1161 -.0809 -.0891 -.0612 -.0339  
60.000 .3735 -.0882 -.2379 -.2183 -.1204 -.0153 -.0555 -.3230 -.2223 -.1265 -.0647 -.0453 -.0315  
90.000 .0241 .3990 -.0492 -.1863 -.1447 -.0044 .1562 .2916 -.1769 -.0506 -.0324 -.0321 -.0315  
120.000 .3946 -.0512 -.2007 -.1775 -.0633 .0517 .0691 -.1255 -.0154 -.0094 -.0483 -.0480 -.0318  
135.000 .3610 -.0811 -.2344 -.2153 -.1215 -.0044 .0557 .1764 .0799 -.0347 -.1488 -.1396 -.0868  
150.000 .2994 -.1116 -.2809 -.2364 -.1318 -.0192 .0684 .1853 .0731 .0691 -.1115 -.1031 -.0465  
165.000 1.0080 .7405 .2994 -.1397 -.2666 -.2423 -.1286 -.0115 .0734 .1717 .0539 .1180 .1145  
180.000 .6105 .2709

X/LY .7400 .8530 .9280

741  
.000 -.0816 -.1145 -.4769  
30.000 -.0551 -.0930 -.4579  
60.000 -.0330 -.0467 -.2797  
90.000 -.0192 -.0296  
120.000 -.0062 -.0684 -.3032  
135.000 .0039 -.0863 -.3742  
150.000 -.0622 -.1817 -.2525  
165.000 -.0158 -.1328 -.4253  
180.000 -.0346 -.1500 -.4402

DATE 08 JAN 79  
TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01741)

**EXTERNAL TANK**

374215+311+K 7:V1 912-115261

16) 14.30 04.40 = 05.10

DEPARTMENT OF THE ARMY  
WASHINGTON, D. C. 20315

[illegible]

4/17	7400	555	9203
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[illegible]
$$\text{ALPHA} ( 3 ) = -.000 \quad \text{BETAY} ( 4 ) = 4.060$$

DEPENDENT VARIABLE C/P

W/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
AWT															
.0000		.6759	.2560	-.1907	-.3371	-.3307	-.2294	-.1220	-.0687	-.1016	-.0902	-.0833	-.0808	-.0589	-.0544
30.0000			.2022	-.2296	-.3429	-.3187	-.2011	-.0880	-.0568	-.1205	-.1065	-.0809	-.0683	-.0600	-.0526
60.0000			.1766	-.2442	-.2963	-.2375	-.1252	-.0079	-.0027	-.2788	-.1927	-.1263	-.0813	-.0530	-.0429
90.0000	.8057		.1651	-.2393	-.2695	-.2008	-.0260	.1575	.2815	-.1432	-.0644	-.0800	-.0812	-.0539	-.0539
120.0000			.1645	-.2180	-.2777	-.2293	-.0636	.0466	.1904	-.1268	-.0745	.0765	.1026	-.0871	-.0666
150.0000								.0076		-.0022				-.1093	
180.0000			.2304	-.1895	-.2886	-.2358	-.1362	-.0119	.0805	.0984	-.2297	-.2742	-.3812	-.2510	-.1585
210.0000				-.1585	-.2624	-.2358	-.1362	-.0273	.1524	.1524	-.0419	-.1455	-.1328	-.1137	-.0902
240.0000			.3039	-.1377	-.2715	-.2478	-.1332	-.0246	.0768	.1551	.0526	-.1190	-.1566	-.1477	-.0864
270.0000	1.0090	.7529													
300.0000									.2451						

0036' 0550' 0012' 2:24

2

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(0811741)

EXTERNAL TANK

ARC11-716 1A14 OL+T12+S12N25

ALPHAT ( 3 ) = -.460 BETAT ( 4 ) = 4.060

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7460 .0330 .9280

PMI  
 .000 -.0621 -.1123 -.4669  
 30.000 -.0374 -.0919 -.4427  
 60.000 -.0309 -.0681 -.3026  
 90.000 -.03.97 -.0754  
 120.000 -.0601 -.1273 -.3150  
 150.000 -.0618 -.1476 -.3481  
 180.000 -.1148 -.2623 -.2908  
 165.000 -.0651 -.1729 -.3684  
 180.000 -.0675 -.1873 -.4339

ALPHAT ( 3 ) = -.470 BETAT ( 3 ) = 8.180

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
 PMI  
 .000 .9330 .6093 .2116 -.2243 -.3743 -.3575 -.2733 -.1682 -.1296 -.1503 -.1369 -.1256 -.1145 -.1082 -.1029  
 30.000 .1086 -.2914 -.3775 -.3442 -.2271 -.1092 -.0678 -.1280 -.1044 -.0691 -.0849 -.0780  
 60.000 .0682 -.3167 -.3303 -.2685 -.2240 .0127 .0174 -.2622 -.1771 -.1302 -.0903 -.0725 -.0638  
 90.000 .4768 .0556 -.3164 -.2935 -.2071 -.0261 .1806 .2996 -.1555 -.0875 -.1124 -.1065 -.0923  
 120.000 .0757 -.2967 -.3118 -.2457 -.0932 .0538 .1055 -.1429 -.1102 -.1163 -.1397 -.1323 -.1124  
 150.000 .1351 -.2673 -.3346 -.3346 -.2845 -.1628 -.0344 .0409 .0418 .3769 -.3940 -.2749 -.2180  
 165.000 .9330 .6267 .2626 -.2171 -.3277 -.2936 -.1800 .0648 .0210 .0864 .0867 .0867 .0867 .0867 .0867  
 180.000 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236  
 270.000 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236 .9236

K/LT .7460 .0330 .9280  
 PMI  
 .000 -.11.4 -.1620 -.5103  
 30.000 -.0749 -.1138 -.4408  
 60.000 -.0722 -.0961 -.3031  
 90.000 -.1059 -.1416  
 120.000 -.0953 -.1505 -.3031  
 150.000 -.0997 -.1756 -.3623  
 180.000 -.2022 -.2988 -.3379  
 165.000 -.1176 -.1987 -.4036  
 180.000 -.1454 -.2462 -.4863



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI14A - VOL. 9

PAGE 4036

ARC11-716 IAI14 CR+TIE-S12M25 (R01741)

ALPHAT( 4 ) = 4.000 BETAT ( 1 ) = -0.170

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

X/LT	0.000	.0200	.0400	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5500	.6300
Phi															
.000	.9226	.7326	.5514	-.1074	-.3029	-.2990	-.2137	-.1247	-.0826	-.0906	-.0929	-.0935	-.0903	-.0867	-.0885
30.000			.4755	.0113	-.2175	-.2172	-.1459	-.0591	-.0491	-.1015	-.0691	-.0580	-.0573	-.0520	-.0483
60.000			.5393	.0753	-.1300	-.1228	-.0406	-.0646	.0492	-.2031	-.0544	-.0259	-.0350	-.0291	-.0162
90.000		.9002	.5042	.0487	-.1274	-.0955	.0220	.1554	.2897		-.2542	-.0459	-.0274	-.0115	.0026
120.000			.5876	-.0469	-.2227	-.2090	-.1203	-.0403	-.0561	-.2121	-.1129	.0020	-.0016	-.0001	.0258
135.000							.0820	.0820		-.0224	.0123			-.0112	
150.000			.2727	-.1603	-.3055	-.2867	-.2046	-.0963	-.0430	.1399	.0405	.0553	-.1275	-.1032	-.0573
165.000				-.2286	-.3459	-.3160	-.2055	-.0922	-.0051	.1347	.0469	-.0177	-.1037	-.0965	-.0142
180.000	.9228	.5914	.1406	-.2660	-.2903	-.3125	-.1840	-.0611	.0137	.1227	.0106	-.1302	-.1594	-.1344	-.0617
270.000	.4003								.2628						

X/LT .7460 .8530 .9200

Phi

.000	-.0969	-.1486	-.4342												
30.000	-.0488	-.0671	-.4418												
60.000	-.0104	-.0144	-.2274												
90.000	.0126	-.0171													
120.000	.0716	.0351	-.2552												
135.000	.0745	.0110	-.3418												
150.000	.0011	-.1120	-.1493												
165.000	-.0396	-.0706	-.4035												
180.000	-.0027	-.1025	-.7990												

ALPHAT( 4 ) = 4.100 BETAT ( 2 ) = -4.080

SECTION ( 1 ) INTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	0.000	.0200	.0400	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5500	.6300
Phi															
.000	.9071	.8065	.5988	-.0699	-.2480	-.2617	-.1841	-.0835	-.0433	-.0585	-.0326	-.0480	-.0492	-.0424	-.0409
30.000			.4488	-.0226	-.2305	-.2179	-.1435	-.0447	-.0186	-.0775	-.0499	-.0368	-.0356	-.0392	-.0323
60.000			.4453	-.0176	-.1892	-.1655	-.0640	.0364	.0613	-.2029	-.0612	-.0350	-.0359	-.0421	-.0270
90.000		.8047	.3911	-.0352	-.1963	-.1906	-.0177	.1401	.2314		-.2154	-.0790	-.0622	-.0379	-.0155
120.000			.5083	-.1310	-.2586	-.2267	-.1244	-.0253	-.0457	-.2180	-.1430	-.0348	-.0516	-.0409	-.0088
135.000							-.0325			-.0190		-.0622		-.0433	
150.000			.2727	-.1632	-.3081	-.2797	-.1790	-.0619	-.0060	.1242	.0571	.1157	-.1282	-.1204	-.0566
165.000				-.2235	-.3238	-.2917	-.1743	-.0504	.0317	.1587	.0550	-.0642	-.1017	-.0802	-.0150
180.000	.9073	.6074	.1633	-.2474	-.3256	-.2885	-.1483	-.0321	.0330	.1375	.0500	-.1053	-.1299	-.0929	-.0415
270.000	.5048								.2376						

X/LT .7460 .8530 .9200

Phi



DATE 06 JAN '75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4837

(RB1741)

EXTERNAL TANK

ARC11-716 1A14 OL+12+S12N25

ALPHAT ( 4 ) = 4.100 BETAT ( 2 ) = -4.080

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8330 .9280

PHI

.000	-.0477	-.1000	-.4571
30.000	-.0336	-.0682	-.4207
60.000	-.0256	-.0299	-.2353
90.000	.0036	-.0048	
120.000	.0318	-.0054	-.2747
135.000	.0348	-.0258	-.3546
150.000	-.0116	-.1342	-.1807
165.000	.0249	-.0875	-.4209
180.000	.0102	-.0966	-.4397

ALPHAT ( 4 ) = 4.110 BETAT ( 3 ) = .030

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000	1.0080	.8233	.4036	-.0635	-.2594	-.2532	-.1738	-.0700	-.0276	-.0469	-.0409	-.0377	-.0294	-.0321	-.0244
30.000			.3851	-.0768	-.2564	-.2446	-.1541	-.0475	-.0143	-.0700	-.0546	-.0410	-.0362	-.0395	-.0321
60.000			.3388	-.1130	-.2408	-.2098	-.0937	-.0423	.0683	-.1978	-.0717	-.0374	-.0466	-.0463	-.0409
90.000		.7016	.2716	-.1534	-.2440	-.1862	-.0356	.1361	.2407		-.1946	-.0815	-.0836	-.0551	-.0258
120.000			.2209	-.1952	-.2812	-.2408	-.1206	-.0066	-.0155	-.2032	-.1525	-.1031	-.0907	-.0690	-.0276
135.000								-.0303		-.0229		-.1043		-.0673	
150.000			.1936	-.2215	-.3098	-.2703	-.1573	-.0392	.0189	.1106	-.1206	-.1073	-.1479	-.1401	-.1075
165.000				-.2328	-.3190	-.2818	-.1567	-.0427	.0458	.1571	.0141	-.0966	-.1147	-.0939	-.0362
180.000	1.0080	.6129	.1776	-.2432	-.3190	-.2827	-.1523	-.0350	.0559	.1538	.0618	-.1037	-.1268	-.0824	-.0238
270.000		.7051													

X/LT .7480 .8330 .9280

PHI

.000	-.0329	-.0831	-.4435
30.000	-.0312	-.0671	-.4208
60.000	-.0392	-.0473	-.2740
90.000	-.0131	-.0164	
120.000	.0082	-.0376	-.2619
135.000	.0100	-.0535	-.3065
150.000	-.0377	-.1904	-.2038
165.000	.0043	-.0848	-.3473
180.000	.0136	-.0795	-.3549

ALPHAT( 4) = 4.108 BETAT ( 4) = 4.092

(R81741)

EXTERNAL TANK

ARC11-716 1A14 Q8+T18+S12N25

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9492	.7949	.3620	-.0764	-.2755	-.2650	-.1865	-.0849	-.0475	-.0661	-.0544	-.0507	-.0456	-.0403
30.000				.2974	-.1454	-.3026	-.2803	-.1829	-.0672	-.0227	-.0809	-.0565	-.0557	-.0517	-.0499
60.000				.2173	-.2068	-.2873	-.2456	-.1109	.0376	.0813	-.1921	-.0796	-.0477	-.0484	-.0493
90.000			.5901	.1610	-.2394	-.2764	-.2082	-.0383	.1405	.2633	-.1722	-.0790	-.0880	-.0677	-.0365
120.000				.1325	-.2567	-.2976	-.2456	-.1100	.0136	.0216	-.1906	-.1601	-.1333	-.1134	-.0466
150.000				.1369	-.2635	-.3214	-.2773	-.1545	-.0139	-.0280	-.0280	-.1327	-.1961	-.0961	
180.000					-.2506	-.3287	-.2897	-.1643	.0421	.1391	-.0379	-.1368	-.1385	-.0993	-.0614
270.000			.9492	.6215	-.1715	-.2473	-.3305	-.2914	-.1652	-.0505	.0371	-.1076	-.1344	-.1262	-.0632
			.6193						.2352						

X/LT .7480 .8530 .9280

PHI

.0000	-.0487	-.0984	-.4557
30.000	-.0487	-.0881	-.4360
60.000	-.0481	-.0678	-.3033
90.000	-.0218	-.0352	
120.000	-.0174	-.0760	-.2942
150.000	-.0286	-.1034	-.3325
180.000	-.1028	-.2039	-.2748
190.000	-.0293	-.2268	-.3466
200.000	-.0369	-.1424	-.4234

ALPHAT( 4) = 4.100 BETAT ( 5) = 6.200

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9138	.7257	.3408	-.1095	-.3080	-.3016	-.2299	-.0850	-.1101	-.0945	-.0941	-.0879	-.0930	-.0852
30.000				.1968	-.2262	-.3520	-.3500	-.2234	-.0482	-.1015	-.0981	-.0908	-.0862	-.0862	-.0819
60.000				.0905	-.2963	-.3349	-.2753	-.1335	.0844	-.1765	-.0921	-.0633	-.0684	-.0645	-.0636
90.000		.4580		.0445	-.3226	-.2989	-.2145	-.0336	.1492	.2791	-.1025	-.0615	-.0826	-.0736	-.0570
120.000				.0360	-.3270	-.3125	-.2461	-.0997	.0301	.0488	-.1842	-.1856	-.1703	-.1470	-.1225
150.000					-.0585				-.0488		-.1626			-.1462	
180.000				.0322	-.3193	-.3414	-.2869	-.1581	.0283	.0431	-.3343	-.3653	-.3393	-.2549	-.1864
190.000					-.3018	-.3585	-.3111	-.1892	.0090	.0897	-.0946	-.2014	-.2082	-.1954	-.1227
270.000		.9138	.5076	.1358	-.2768	-.3558	-.3214	-.1916	-.0868	.0081	.0894	-.1694	-.2509	-.2182	-.1390
			.9022						.2301						

X/LT .7480 .8530 .9280

PHI

DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(R01741)

EXTERNAL TANK

ARC:-716 1A14 CL+12+SI2M25

ALPHAT( 4) = 4.100 BETAT ( 5) = 9.200

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>0</sub>

X/LT .7460 .8530 .9260

PHI  
 .000 -.0980 -.1449 -.4919  
 30.000 -.0793 -.1216 -.4446  
 60.000 -.0613 -.0752 -.2931  
 90.000 -.0527 -.0581  
 120.000 -.0556 -.0863 -.3102  
 135.000 -.0657 -.1378 -.3546  
 150.000 -.1606 -.2614 -.3257  
 165.000 -.0844 -.1697 -.3827  
 180.000 -.1080 -.2147 -.4597

ALPHAT( 5) = 8.040 BETAT ( 1) = -8.140

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>0</sub>

X/LT .0000 .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6360

PHI  
 .000 .8639 .8205 .4583 -.0019 -.2294 -.2271 -.1622 -.0767 -.0416 -.0337 -.0547 -.0589 -.0600 -.0531 -.0597  
 30.000 .5865 .1174 -.1318 -.1392 -.0805 .0111 .0274 -.0295 -.0055 -.0045 -.0055 -.0128 -.0074  
 60.000 .5958 .1314 -.0828 -.0746 .0049 .1218 .1549 -.0847 .0066 .0375 .0286 .0195 .0187  
 90.000 .8390 .4665 .0280 .1537 .1214 .0112 .1112 .1510 .1159 .0572 .0080 .0005 .0220  
 120.000 .2783 -.1409 -.2977 -.2799 -.2197 -.1354 .1846 -.2759 .15946 .0236 .0172 .0161 .0398  
 135.000 .1482 -.2640 -.3789 -.3511 -.2636 -.1549 -.1020 .0966 .0010 -.0618 .1053 -.0876 -.0392  
 150.000 .8639 .4665 .0324 .3226 .3944 .3558 .2377 .1200 .0284 .1112 .0358 .0054 .0742 .0730 .0060  
 180.000 .0639 .4665 .0324 .3226 .3944 .3558 .2377 .1200 .0284 .1112 .0358 .0054 .0742 .0730 .0060  
 270.000 .0278 .0711 .4119

X/LT .7460 .8530 .9260

PHI  
 .000 -.0663 -.1229 -.4652  
 30.000 -.0125 -.0902 -.4069  
 60.000 .0177 .0072 -.2159  
 90.000 .0524 .0201  
 120.000 .0671 .0698 -.2375  
 135.000 .1006 .0603 .3184  
 150.000 .0307 .0766 .1145  
 165.000 .0600 .0371 .3937  
 180.000 .0278 .0711 .4119

ARC11-716 1A14 Q1+T12+312N25 (R81741)

ALPHAT ( 5 ) = 8.080 BETAT ( 2 ) = -4.093

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0280	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.000	.9229	.8950	.9091	.0391	-.1926	-.1981	-.1272	-.0348	.0044	-.0118	-.0133	-.0139	-.0156	-.0136
30.000				.5400	.0715	-.1555	-.1601	-.0833	.0083	.0417	-.0130	-.0029	.0027	-.0003	.0012
60.000				.4797	.0230	-.1544	-.1381	-.0372	.0945	.1448	-.0940	-.0180	.0198	.0101	.0065
90.000			.7405	.3436	-.0831	-.2187	-.1772	-.0472	.0960	.1451	-.0710	.0390	-.0186	-.0257	-.0023
120.000				.2032	-.2026	-.3160	-.2894	-.1930	-.1135	-.1489	-.2710	-.3920	-.0696	-.0337	.0074
135.000								-.1209		-.0567	-.0758		-.0351		
150.000				.1187	-.2800	-.3651	-.3297	-.2214	-.1108	-.0532	.0981	.0127	-.1296	-.1241	-.0464
165.000				-.3090	-.3678	-.3226	-.1960	-.0783	.0112	.1338	.0491	.0462	-.0462	-.0830	.0006
180.000		.9229	.4788	.0509	-.3257	-.3563	-.3055	-.1673	.0384	.1423	.0604	-.0989	-.1076	-.0729	-.0186
270.000			.5276					-.0449	.1756						

X/LT .7460 .8530 .9280

PMI

.000	-.0219	-.0750	-.4404
30.000	.0012	-.0356	-.3906
60.000	.0050	-.0059	-.2239
90.000	.0287	.0171	
120.000	.0570	.0332	-.2369
135.000	.0609	.0076	-.3156
150.000	.0171	-.0945	-.1452
165.000	.0900	-.0995	-.3909
180.000	.0356	-.0754	-.4130

ALPHAT ( 5 ) = 8.090 BETAT ( 3 ) = -.020

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.000	.9477	.9129	.5173	.0468	-.1821	-.1823	-.1185	-.0237	.0129	-.0009	.0002	-.0003	.0018	.0024
30.000				.4725	.0072	-.2016	-.1994	-.1146	-.0068	.0378	-.0216	-.0128	-.0109	-.0081	-.0077
60.000				.3603	-.0800	-.2280	-.1977	-.0819	.0680	.1399	-.0956	-.0333	-.0021	-.0063	-.0100
90.000		.6345		.2337	-.1835	-.2697	-.2147	-.0662	.0890	.1532	-.0931	.0071	.0285	-.0322	-.0133
120.000				.1902	-.2584	-.3256	-.2889	-.1736	-.0726	-.1061	-.2583	-.3713	-.1059	-.0664	-.0075
135.000								-.0812		-.0441		-.1193		-.0997	
150.000				.0851	-.2970	-.3453	-.3075	-.1911	-.0708	-.0139	.0808	-.0857	-.1340	-.1363	-.0883
165.000				-.3068	-.3516	-.3004	-.1751	-.0540	.0323	.1424	.0115	.0115	-.0796	-.1001	-.0707
180.000		.9477	.4805	.0680	-.3183	-.3489	-.3039	-.1650	.0382	.1430	.0713	-.0920	-.1084	-.0633	-.0065
270.000			.6431					-.0454	.1569						

X/LT .7460 .8530 .9280

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01741)

EXTERNAL TANK

ARC11-716 1A14 01+12+512M25

ALPHAT ( 5 ) = 0.090 BETAT ( 3 ) = -.020

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7400 .8330 .9280

PHI  
 .000 -.0093 -.0819 -.4212  
 30.000 -.0119 -.0487 -.4067  
 60.000 -.0107 -.0242 -.2589  
 90.000 .0135 .0044  
 120.000 .0360 .0044 -.2415  
 135.000 .0260 -.0224 -.2866  
 150.000 -.0301 -.1062 -.1816  
 165.000 .0345 -.0479 -.3309  
 180.000 .0348 -.0459 -.3415

ALPHAT ( 5 ) = 7.950 BETAT ( 4 ) = 8.220

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0060 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 .8582 .8160 .4565 -.0004 -.2296 -.2369 -.1755 -.0819 -.0405 -.0631 -.0611 -.0628 -.0640 -.0638 -.0648  
 30.000 .2576 -.1687 -.3304 -.3132 -.2197 -.1064 -.0343 -.0834 -.0859 -.0784 -.0877 -.0915 -.0890  
 60.000 .0948 -.2923 -.3465 -.2954 -.1538 -.0174 .1379 -.0960 -.0797 -.0377 -.0328 -.0340 -.0339  
 90.000 .3940 -.0007 -.3422 -.3287 -.2437 -.0633 .1052 .1943 -.1378 -.0233 -.0905 -.0598 -.0551  
 120.000 -.0295 -.3589 -.3251 -.2594 -.1190 .0008 -.0137 -.1979 -.3347 -.1483 -.1116 -.0864 -.0674  
 135.000 .0221 -.3666 -.3491 -.2852 -.1579 -.0331 .0203 .0413 -.2872 -.3523 -.2715 -.2137 -.1432  
 150.000 .3640 .3771 .3173 .1862 .0673 .0177 .0943 -.0876 -.1630 .1783 .1666 .0939  
 165.000 .8582 .4078 .0272 .3494 .3850 .3340 .2051 .0948 .0091 .0833 .0046 .1374 .2125 .1937 .1095  
 180.000 .8491  
 270.000

X/LT .7400 .8330 .9280

PHI  
 .000 -.0753 -.1261 -.4682  
 30.000 -.0818 -.1179 -.4426  
 60.000 -.0311 -.0320 -.2598  
 90.000 .0367 -.0397  
 120.000 -.0305 -.0708 -.2781  
 135.000 -.0346 -.0911 -.3243  
 150.000 -.1114 -.2105 -.2949  
 165.000 -.0435 -.1260 -.3649  
 180.000 -.0779 -.1719 -.4520

ARC11-716 1A14 CR+112+312N25 (R81742) ( 14 FEB 74 )

## REFERENCE DATA

REF = 2.4210 SQ. FT. WARP = 29.5800 INCHES  
 LREF = 38.7090 INCHES WARP = .0000 INCHES  
 GREF = 38.7090 INCHES ZWARP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHAT( 1 ) = -8.370 BETAT ( 1 ) = -8.110

## PARAMETRIC DATA

MACH = .750 ELEVON = .000  
 RUDDER = .000 SPDRK = .000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI	.0000	.4502	.0506	-.3991	-.3639	-.3165	-.1835	-.1568	-.1290	-.1765	-.2023	-.1566	-.0997	-.0887	-.0832
30.000			.1416	-.3138	-.3681	-.3439	-.2313	-.2433	-.2472	-.3300	-.3381	-.1978	-.1244	-.1182	-.1018
60.000			.3082	-.1623	-.2519	-.2396	-.2394	-.1879	-.3098	-.4734	-.6769	-.1932	-.0295	-.0431	-.0530
90.000		.8849	.4972	.0288	-.1044	-.0722	-.0095	.1391	.1591	-.7064	-.5870	-.2232	-.1826	-.1312	
120.000			.6271	.1541	-.0178	-.0036	.0487	.1855	.2767	.0462	.0494	.0227	.0025	-.0009	.0232
135.000								.1506		.1775		.0182		-.0171	
150.000			.6466	.1790	-.0143	-.0093	-.0013	.1246	.1933	.3098	.1770	-.0316	-.1384	-.1294	-.0732
165.000				.1665	-.0531	-.0484	-.0392	.0715	.1610	.2786	.1330	-.0435	-.1304	-.1300	-.0512
180.000		.9348	.5290	.1048	-.0979	-.0864	-.0760	.0428	.1325	.2342	.0558	-.1642	-.1919	-.1742	-.1049
270.000		.4549						.1992							

X/LT .7480 .8530 .9280

## PHI

.0000	-.0920	-.1405	-.4768
30.000	-.1131	-.1416	-.4382
60.000	-.0883	-.1048	-.2296
90.000	-.1194	-.2765	
120.000	.0266	-.0969	-.1880
135.000	.0328	-.1117	-.2861
150.000	-.0585	-.1795	-.1041
165.000	-.0383	-.1528	-.3810
180.000	-.0780	-.1825	-.4299

ALPHAT( 1 ) = -8.820 BETAT ( 2 ) = -4.060

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI	.0000	.9824	.9026	.0785	-.3716	-.4331	-.3770	-.2389	-.0981	-.1531	-.1836	-.1307	-.0725	-.0327	-.0397
30.000			.1297	-.3261	-.4444	-.4020	-.2790	-.1719	-.1782	-.2541	-.3113	-.1551	-.0919	-.0787	-.0712
60.000			.2343	-.2323	-.3701	-.3303	-.2342	-.1499	-.2548	-.4228	-.6700	-.2200	-.0335	-.0385	-.0500
90.000		.7939	.3890	-.0855	-.2472	-.1967	-.0370	.1207	.1589	-.6691	-.5835	-.2138	-.1234	-.0988	
120.000			.5267	.0519	-.1595	-.1355	-.0006	.1569	.2621	.0311	-.0105	-.0462	-.0817	-.0385	-.0093
135.000								.1256		.1462		-.0511		-.0544	
150.000			.5946	.1078	-.1280	-.1198	-.0262	.1076	.1889	.2697	.0302	-.0193	-.1688	-.1434	-.0883
180.000															



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

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(RB1742)

EXTERNAL TANK

ARC11-716 IA14 OA+712+512N25

ALPHAT (1) = -8.220 BEYAT (2) = -4.060

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0380	.0690	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
165.000				.1065	-.1350	-.1331	-.0388	.0829	.1783	.2834	.0911	-.0882	-.1632	-.1245	-.0483
180.000	.9824	.9769	.5649	.0761	-.1594	-.1484	-.0446	.0727	.1617	.2656	.0770	-.1637	-.1622	-.1360	-.0748
270.000		.5722							.1715						

X/LT .7480 .8530 .9280

PHI

.000	-.0888	-.1219	-.4537
30.000	-.0791	-.1175	-.4496
60.000	-.0681	-.0845	-.2516
90.000	-.1297	-.1576	
120.000	-.0125	-.1432	-.2397
135.000	-.0180	-.1691	-.3284
150.000	-.0918	-.2427	-.1564
165.000	-.0446	-.1875	-.3772
180.000	-.0634	-.2061	-.4374

ALPHAT (1) = -8.200 BEYAT (3) = .010

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9834	.5251	.0905	-.3072	-.4296	-.3688	-.2273	-.1052	-.0860	-.1382	-.1838	-.1205	-.0574	-.0321	-.0287
30.000		.1346	-.3421	-.4212	-.3694	-.2276	-.1178	-.1136	-.1922	-.2753	-.2753	-.1519	-.0670	-.0807	-.0515
60.000		.1630	-.2890	-.3714	-.3224	-.1985	-.1056	-.1913	-.3620	-.6411	-.2408	-.0365	-.0360	-.0423	
90.000		.6947	.2708	-.1913	-.2995	-.2353	-.0580	.1154	.1693	-.6249	-.5472	-.1841	-.0880	-.0712	
120.000			.4019	-.0821	-.2326	-.1997	-.0522	.1238	.2528	.0165	-.0612	-.1064	-.1042	-.0685	-.0324
135.000								.0988	.1117		-.1082			-.0896	
150.000			.5112	.0287	-.1871	-.1598	-.0651	.0750	.1715	.2243	-.1316	-.1671	-.2150	-.1691	-.1447
165.000			.0739	-.1549	-.1488	-.0479	.0732	.1688	.2691	.0183	-.1433	-.1788	-.1802	-.0637	
180.000	.9834	.9799	.5697	.0800	-.1570	-.1424	-.0316	.0805	.1722	.2615	.0839	-.1542	-.1853	-.1124	-.0480
270.000		.6886													

X/LT .7480 .8530 .9280

PHI

.000	-.0324	-.1100	-.4391
30.000	-.0612	-.0994	-.4191
60.000	-.0572	-.0783	-.2767
90.000	-.0826	-.1095	
120.000	-.0437	-.1828	-.3082
135.000	-.0513	-.2055	-.3553
150.000	-.1436	-.3056	-.2634



ARC11-716 1A14 Q4+T18+812N23 (R81742)

EXTERNAL TANK

ALPHAT ( 1 ) = -0.000 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0500 .0200

PHI

100.000 -0.000 -0.2193 -0.3898  
 100.000 -0.0500 -0.2093 -0.4219

ALPHAT ( 1 ) = -0.010 BETAT ( 4 ) = 4.000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0080 .0400 .1100 .1700 .1940 .2190 .2420 .2600 .3440 .3940 .4510 .5030 .5500 .6300

PHI

.000 .9628 .9028 .0833 -.3684 -.4348 -.3738 -.2419 -.1222 -.1000 -.1467 -.1838 -.1598 -.0883 -.0566  
 30.000 .0669 -.3730 -.4086 -.3462 -.2019 -.0801 -.0705 -.1585 -.2388 -.1494 -.0472 -.0446 -.0478  
 60.000 .0842 -.3485 -.3794 -.3032 -.1610 -.0327 -.1240 -.3243 -.6195 -.2134 -.0363 -.0363 -.0409  
 90.000 .5768 .1500 -.2899 -.3341 -.2463 -.0575 .1289 .1877 -.6151 -.9904 -.1446 -.0717 -.0490  
 120.000 .2774 -.1855 -.3599 -.2537 -.0886 .0992 .2442 .0023 -.1101 -.1473 -.1263 -.0910 -.0803  
 150.000 .4037 -.0728 -.2568 -.2333 -.1142 .0298 .1360 .1628 .0668 -.1746 -.1321  
 180.000 .0154 -.2024 -.1838 -.0806 .0397 .1374 .2281 -.0360 -.1790 -.1980 -.1276 -.0939  
 210.000 .9628 .9728 .5558 .0667 -.1804 -.1530 -.0450 .0613 .1591 .2379 .0724 -.1892 -.1611  
 270.000 .7948 .9220 .1513

W/LT .7400 .0500 .0200

PHI

.000 -.0716 -.1186 -.4513  
 30.000 -.0598 -.1050 -.4366  
 60.000 -.0599 -.0901 -.3141  
 90.000 -.0649 -.1218  
 120.000 -.0803 -.2271 -.3699  
 150.000 -.0962 -.2452 -.4000  
 180.000 -.2012 -.3693 -.3617  
 210.000 -.0927 -.2433 -.4258  
 270.000 -.0998 -.2429 -.4719



ALPHAT( 1 ) = -0.400 BETAT ( 5 ) = 0.190

(R81742)

EXTERNAL TANK

ARC11-716 1A14 OL+712+312N25

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	.0000	.4348	.0392	-.4029	-.4671	-.4176	-.2755	-.1641	-.1349	-.1762	-.2008	-.1520	-.1091	-.0943	-.0847
30.000			.0034	-.4166	-.4136	-.3376	-.1842	-.0700	-.0539	-.1411	-.2214	-.1439	-.0638	-.0828	-.0790
60.000			.0051	-.4082	-.3637	-.2771	-.1290	-.0154	-.0732	-.2845	-.6078	-.1903	-.0409	-.0448	-.0322
90.000			.4303	-.3864	-.3745	-.3542	-.2497	-.0535	.2011	-.2011	-.6159	-.4374	-.1199	-.0803	-.0506
120.000			.1468	-.2924	-.3680	-.3006	-.1259	.0673	.2324	-.0157	-.1474	-.1929	-.1720	-.1477	-.1236
135.000								-.0032	.0184	-.0184	-.2559	-.2559	-.2020		
150.000			.2947	-.1632	-.3314	-.2949	-.1781	-.0296	.0872	.0753	-.3827	-.5141	-.4389	-.3029	-.2461
165.000				-.0464	-.2554	-.2378	-.1392	-.0177	.0851	.1418	-.1125	-.2365	-.2590	-.2344	-.1807
180.000		.8641	.5251	.0401	-.1924	-.1892	-.0782	.0247	.1178	.1834	.0434	-.1906	-.2987	-.2463	-.1687
270.000		.8807							.1438						

K/LT .7480 .8530 .9280

PMI

.000	-.0633	-.1418	-.4798
30.000	-.0932	-.1319	-.4490
60.000	-.0803	-.1005	-.3072
90.000	-.0783	-.1661	
120.000	-.1300	-.2477	-.3698
135.000	-.1356	-.2587	-.4070
150.000	-.2654	-.3854	-.3997
165.000	-.1528	-.2691	-.4359
180.000	-.1805	-.2941	-.4761

ALPHAT( 2 ) = -4.380 BETAT ( 1 ) = -0.180

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	.9702	.5719	1645	-.3039	-.4382	-.3989	-.2716	-.1550	-.1323	-.1727	-.1766	-.1332	-.1020	-.0998	-.0945
30.000			.2719	-.2065	-.4010	-.3779	-.2686	-.1765	-.1894	-.2653	-.2587	-.1424	-.1201	-.1096	-.0941
60.000			.4164	-.0682	-.2777	-.2529	-.1631	-.0660	-.1802	-.4254	-.5725	-.0985	-.0193	-.0267	-.0446
90.000		.9423	.5357	.0495	-.1328	-.1165	.0280	.1858	.2659	-.5632	-.2583	-.1269	-.1070	-.0978	
120.000			.5802	.0993	-.1239	-.1104	.0080	.1414	.1905	-.0557	.0050	.0267	-.0067	-.0138	
135.000								.0888	.1109			.0141		-.0286	
150.000			.5495	.0631	-.1632	-.1580	-.0588	.0568	.1178	.2563	.1276	-.0423	-.1536	-.1331	-.0873
165.000			.0000	.0000	-.2175	-.2055	-.1094	.0125	.1047	.2391	.1115	-.0421	-.1338	-.1294	-.0476
180.000	.9702	.8656	.4151	-.0642	-.2584	-.2374	-.1214	-.0030	.0926	.2115	.0447	-.1542	-.1874	-.1667	-.0887
270.000		.5218							.3153						

K/LT .7480 .8530 .9280

PMI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

0881742

EXTERNAL TANK

ARC11-716 1A14 CR+T12+312M25

ALPHAT(2) = -4.360 BETAT(1) = -0.100

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .6330 .8800

PHI

.000 -.1019 -.1449 -.4708  
30.000 -.0931 -.1212 -.4431  
60.000 -.0543 -.0626 -.2223  
90.000 -.1392 -.1535  
120.000 .0401 -.0276 -.1797  
135.000 .0466 -.0467 -.2773  
150.000 -.0234 -.1237 -.0695  
165.000 -.0740 -.0967 -.4013  
180.000 -.0372 -.1305 -.4397

ALPHAT(2) = -4.360 BETAT(2) = -4.100

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT .0000 .0060 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5560 .6360

PHI

.000 1.0310 .6298 .1971 -.2706 -.4095 -.3691 -.2287 -.1169 -.0944 -.1408 -.1429 -.1063 -.0716 -.0348 -.0329  
30.000 .2512 -.2212 -.3075 -.3552 -.2294 -.1273 -.1342 -.2278 -.2010 -.1215 -.0935 -.0753 -.0626  
60.000 .3367 -.1448 -.3034 -.2712 -.1590 -.0498 -.1205 -.4207 -.5536 -.0879 -.0364 -.0369 -.0363  
90.000 .8367 .4248 -.0557 -.2213 -.7650 -.0710 .1762 .2715 -.3977 -.0287 -.0455 -.0304 -.0363  
120.000 .4879 .0269 -.1884 -.1547 -.0243 .1271 .1950 -.0732 -.0133 -.0368 -.0487 -.0497 -.0199  
135.000 .4998 .0117 -.1986 -.1750 -.0722 .0629 .1310 .2350 .0405 -.0272 -.1625 -.1494 -.0923  
150.000 .4998 .0117 -.1986 -.1750 -.0722 .0629 .1310 .2350 .0405 -.0272 -.1625 -.1494 -.0923  
165.000 .4409 .0069 .0069 .4409 .0069 .0069 .4409 .0069 .0069 .4409 .0069 .0069 .4409 .0069  
180.000 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069  
270.000 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069 .0069 .6419 .0069

W/LT .7400 .6330 .8800

PHI

.000 -.0568 -.1056 -.4456  
30.000 -.0982 -.0907 -.4163  
60.000 -.0454 -.0632 -.2459  
90.000 -.0345 -.0538  
120.000 .0040 -.0605 -.2609  
135.000 .0024 -.1013 -.3293  
150.000 -.0995 -.1752 -.1441  
165.000 -.0199 -.1335 -.3011  
180.000 -.0335 -.1541 -.4359



ARC11-716 1A14 Q1+T12+512N23

(R01742)

ALPHAT (2) = -4.350 BETAT (3) = .010

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CF

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0330	.6472	.2041	-.2714	-.3976	-.3603	-.2233	-.1091	-.0837	-.1367	-.1284	-.0882	-.0610	-.0435	-.0416
30.000			.2194	-.2805	-.3899	-.3473	-.2091	-.0897	-.0909	-.1919	-.1696	-.0934	-.0773	-.0622	-.0479
60.000			.2327	-.2221	-.3315	-.2794	-.1415	-.0199	-.0819	-.4090	-.5054	-.1138	-.0486	-.0410	-.0330
90.000		.752	.3094	-.1627	-.2775	-.1975	-.0155	.1697	.2794		-.3389	.0050	-.0361	-.0593	-.0332
120.000			.3771	-.0966	-.2568	-.2032	-.0490	.1117	.1975	-.0822	-.0356	-.0635	-.0882	-.0720	-.0417
150.000								.0692		.0690		-.1015		-.0915	
180.000			.4336	-.0357	-.2388	-.2128	-.0952	.0515	.1353	.1939	-.1288	-.1457	-.2144	-.1741	-.1383
210.000	1.0330	.8929	.4600	-.0300	-.2326	-.2100	-.0952	.0395	.1346	.2379	.0213	-.1264	-.1689	-.1268	-.0639
270.000		.7518		-.0314	-.2319	-.2075	-.0827	.0420	.1366	.2298	.0789	-.1383	-.1743	-.1200	-.0482
K/LT	.7460	.8330	.9280					.2722							

PHI															
.000	-.0454	-.0970	-.4367												
30.000	-.0519	-.0863	-.4261												
60.000	-.0410	-.0600	-.2781												
90.000	-.0339	-.0689													
120.000	-.0256	-.1148	-.2811												
150.000	-.0310	-.1363	-.3256												
180.000	-.1078	-.2344	-.2365												
210.000	-.0396	-.1993	-.3620												
270.000	-.0327	-.1484	-.3900												

ALPHAT (2) = -4.360 BETAT (4) = 4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CF

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0290	.6242	.1876	-.2980	-.4072	-.3669	-.2400	-.1205	-.0982	-.1455	-.1382	-.1041	-.0756	-.0550	-.0316
30.000			.1638	-.3012	-.3942	-.3429	-.1962	-.0722	-.0619	-.1684	-.1657	-.0990	-.0661	-.0470	.0320
60.000			.1620	-.2968	-.3458	-.2768	-.1240	.0065	-.0364	-.3877	-.4473	-.1566	-.0720	-.0330	-.0111
90.000		.6370	.1942	-.2630	-.3105	-.2199	-.0194	.1737	.2973	-.2964	.0200	-.0756	-.3739	-.0674	
120.000			.2560	-.2052	-.3039	-.2432	-.0703	.1021	.2021	-.0905	-.0941	-.0934	-.0101	-.0577	
150.000								.0483		.0340		-.1342		-.0129	
180.000			.3446	-.1355	-.2859	-.2517	-.1222	.0252	.1187	.1415	-.2551	-.3474	-.3480	-.2581	-.1384
210.000	1.0290	.8921	-.0720	-.2674	-.2391	-.1182	.0981	.1120	.2061	-.0365	-.2365	-.1858	-.1345	-.0668	
270.000		.8582	.4484	-.0441	-.2416	-.2190	-.0967	.0194	.1212	.2117	.0702	-.1489	-.1808	-.1619	-.0896
K/LT	.7460	.8330	.9280					.2626							

PHI

08017482)

EXTERNAL TANK

ARC11-715 1A14 CR-112-512M25

ALPHAT( 2) = -4.380 BETAT ( 4) = 4.080

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7480 .8530 .9280

PMI

.000 -.0982 -.1065 -.4406  
 30.000 -.0942 -.0956 -.4406  
 60.000 -.0436 -.0639 -.2755  
 90.000 -.0619 -.1034  
 120.000 -.0619 -.1595 -.3103  
 135.000 -.0486 -.1780 -.3582  
 150.000 -.1525 -.2090 -.3185  
 165.000 -.0655 -.1812 -.3904  
 180.000 -.0708 -.1865 -.4471

ALPHAT( 2) = -4.380 BETAT ( 5) = 8.190

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3460 .3940 .4310 .5030 .5580 .6380

PMI

.000 .9634 .5805 .1544 -.3105 -.4388 -.4006 -.2715 -.1593 -.1367 -.1762 -.1725 -.1339 -.1091 -.0977 -.0919  
 30.000 .0626 -.3581 -.4087 -.3424 -.1922 -.0729 -.0531 -.1618 -.1809 -.1058 -.0831 -.0806 -.0721  
 60.000 .0671 -.3627 -.3480 -.2656 -.1042 -.0298 .0031 -.3674 -.3886 -.1697 -.0905 -.0883 -.0580  
 90.000 .5178 .0799 -.3413 -.3234 -.2121 -.0109 .003 .3212 -.2653 .0153 -.0710 -.1063 -.1201  
 120.000 .1475 -.2971 -.3408 -.2595 -.0890 .0930 .1987 -.1105 -.1328 -.1490 -.1416 -.1197  
 135.000 .0000  
 150.000 .2363 -.2221 -.3424 -.2947 -.1806 -.0125 .0912 .0815 -.3632 -.4665 -.4810 -.2847 -.2133  
 165.000 -.1321 -.3112 -.2767 -.1806 -.0323 .0705 .1304 -.1059 -.2163 -.2346 -.2172 -.1465  
 180.000 .9634 .7858 .4147 -.0880 -.2667 -.2417 -.1278 -.0125 .0629 .1325 .0406 -.1817 -.2813 -.2473 -.1592  
 210.000 .9440

W/LT .7480 .8530 .9280

PMI

.000 -.0981 -.1433 -.4731  
 30.000 -.0781 -.1078 -.4292  
 60.000 -.0577 -.0819 -.2551  
 90.000 -.1370 -.2006  
 120.000 -.1077 -.1771 -.2903  
 135.000 -.1034 -.1821 -.3664  
 150.000 -.2790 -.3828 -.5622  
 165.000 -.1160 -.2067 -.4270  
 180.000 -.1444 -.2408 -.5038



DATE 06 JAN 75

ISOLATED MEASURE DATA - IAL14 - VOL. 9

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ALC11-716 IAL14 2C+712+512N25

(RBIT42)

ALPHAT (3) = -.980 BETAT (1) = -8.200

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0400	.1130	.1760	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6360
PHI															
.000	.9825	.6497	.2637	-.2219	-.4023	-.3734	-.2559	-.1447	-.1144	-.1534	-.1310	-.1255	-.1039	-.0902	-.0629
30.000			.3633	-.1023	-.3344	-.3193	-.2207	-.1250	-.1298	-.2189	-.1808	-.1178	-.0949	-.0653	-.0729
60.000			.4950	.0029	-.2141	-.1973	-.0983	.0385	-.0418	-.3740	-.3975	-.0642	-.0107	-.0133	-.0157
90.000		.9683	.5527	.0651	-.1456	-.1062	.0366	.2023	.3081		-.4024	.0324	-.0175	-.0341	-.0216
120.000			.5273	.0469	-.1764	-.1529	-.0369	.0860	.0971	-.1490	.0026	.0586	-.0036	-.0193	.0004
150.000								.0286		.0516		.0293		-.0316	
180.000			.4900	-.0311	-.2442	-.2232	-.1250	-.0006	.0529	.2152	.1053	-.0413	-.1530	-.1143	-.0373
210.000				-.1022	-.2961	-.2702	-.1541	-.0302	.0558	.2061	.0991	-.0254	-.1337	-.1176	-.0329
240.000	.9985	.7792	.3122	-.1804	-.3198	-.2942	-.1909	-.0228	.0613	.1890	.0410	-.1477	-.1858	-.1666	-.0917
270.000		.5337													
K/LT	.7400	.6530	.9280												

K/LT .7400 .6530 .9280

PHI

.000	-.0699	-.1361	-.4470												
30.000	-.0694	-.0936	-.4201												
60.000	-.0137	-.0214	-.2199												
90.000	.0026	-.0132													
120.000	.0344	.0117	-.2123												
150.000	.0581	-.0059	-.2820												
180.000	.0241	-.0911	-.0370												
210.000	.0219	-.0642	-.3912												
240.000	-.0140	-.0941	-.4356												

ALPHAT (3) = -.980 BETAT (2) = -4.090

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0210	.0400	.1130	.1760	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6360
PHI															
.000	1.0360	.7364	.3026	-.1921	-.3732	-.3441	-.2253	-.1035	-.0750	-.1108	-.1149	-.0693	-.0673	-.0977	-.0303
30.000			.3552	-.1371	-.3394	-.3114	-.1940	-.0646	-.0612	-.1796	-.1513	-.0942	-.0713	-.0633	-.0472
60.000			.4142	-.0616	-.2851	-.2264	-.1062	.0203	-.0137	-.3727	-.3944	-.0944	-.0273	-.0235	-.0190
90.000		.8762	.4399	-.0303	-.2151	-.1572	.0090	.1924	.3137		-.4332	.0198	-.0542	-.0736	-.0303
120.000			.4335	-.0534	-.2260	-.1894	-.0555	.0854	.1190	-.1632	-.0395	.0056	-.0558	-.0643	-.0307
150.000								.0419	.0423				-.0375	-.0729	
180.000			.4065	-.0791	-.2514	-.2339	-.1201	.0192	.0762	.1931	.0455	-.0350	-.1630	-.1476	-.0714
210.000				-.1119	-.2901	-.2562	-.1307	.0001	.0971	.2167	.0939	-.0756	-.1463	-.1224	-.0333
240.000	1.0360	.7971	.3439	-.1444	-.3710	-.3657	-.2221	.1193	.0331	.2127	.0736	-.1120	-.1631	-.1307	-.0617
270.000		.3463													
K/LT	.7400	.6530	.9280												

PHI

(R01742)

EXTERNAL TANK

ARC11-716 1A14 01+712+312N25

ALPHAT ( 3 ) = -.350 BETAT ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8430 .9280

PHI

.000 -.0513 -.0948 -.4164  
 30.000 -.0423 -.0729 -.3956  
 60.000 -.0201 -.0268 -.2319  
 90.000 -.0132 -.0123  
 120.000 .0109 -.0349 -.2483  
 135.000 .0217 -.0506 -.3126  
 150.000 -.0245 -.1336 -.1388  
 165.000 .0069 -.0894 -.3998  
 180.000 -.0093 -.1026 -.4346

ALPHAT ( 3 ) = -.540 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0030 .0030 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.0750 .7532 .3128 -.1861 -.5629 -.3380 -.2139 -.0897 -.0623 -.1121 -.1071 -.0802 -.0537 -.0312 -.0344  
 30.000 .3110 -.1752 -.3487 -.3172 -.1856 -.0631 -.1590 -.1433 -.1433 -.1590 -.1433 -.0839 -.0624 -.0531 -.0414  
 60.000 .3140 -.1694 -.3056 -.2526 -.1098 .0308 .0133 .3059 .3259 .3059 .3259 .3259 .3059 .3259 .3059  
 90.000 .7735 .3231 -.1580 -.2736 -.1959 -.0048 .1903 .3259 .3259 .3259 .3259 .3259 .3259 .3259 .3259  
 120.000 .3372 -.1422 -.2718 -.2222 -.0663 .0833 .0833 .0833 .0833 .0833 .0833 .0833 .0833 .0833 .0833  
 135.000 .3496 -.1358 -.2855 -.2443 -.1170 .0242 .0922 .0922 .0922 .0922 .0922 .0922 .0922 .0922 .0922  
 150.000 .3496 -.1354 -.2962 -.2631 -.1193 .0576 .0576 .0576 .0576 .0576 .0576 .0576 .0576 .0576 .0576  
 165.000 1.0750 .7963 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496  
 180.000 .7783 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496 .3496  
 270.000 .7460 .8430 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280 .9280

PHI

.000 -.0385 -.0790 -.4216  
 30.000 -.0332 -.0699 -.4141  
 60.000 -.0293 -.0417 -.2528  
 90.000 -.0288 -.0285  
 120.000 -.0137 -.0662 -.2556  
 135.000 -.0092 -.0815 -.3022  
 150.000 -.0734 -.1728 -.2219  
 165.000 -.0141 -.1125 -.3508  
 180.000 -.0062 -.1035 -.3710



ARC11-716 IA14 Q8+T12+S12+23

(R81742)

EXTERNAL TANK

ALPHAT ( 3 ) = -.550 BETAT ( 4 ) = 4.100

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0510	.7286	.2945	-.1964	-.3743	-.3510	-.2291	-.1063	-.0803	-.1262	-.1210	-.0936	-.0693	-.0383	-.0514
30.000			.2415	-.2380	-.3743	-.3316	-.1913	-.0630	-.0364	-.1422	-.1401	-.0921	-.0686	-.0620	-.0461
60.000			.2128	-.2349	-.3337	-.2686	-.1058	.0487	.0457	-.3505	-.3225	-.1477	-.0781	-.0378	-.0419
90.000		.6572	.2034	-.2556	-.2992	-.2107	-.0572	.1571	.3487		-.3836	-.0315	-.1066	-.1151	-.0772
120.000			.2284	-.2329	-.3099	-.2403	-.0702	.0909	.1512	-.1644	-.1033	-.0807	-.1190	-.1032	-.0682
135.000								.0411		.0096		-.1215		-.1239	
150.000			.2716	-.2014	-.3232	-.2721	-.1299	.0159	.0953	.1235	-.2344	-.3051	-.3348	-.2500	-.1436
165.000				-.1668	-.3129	-.2755	-.1426	-.0070	.0872	.1867	-.0399	-.1570	-.1757	-.1271	-.0814
180.000	1.0510	.8028	.3423	-.1454	-.3077	-.2739	-.1896	-.0072	.0891	.1853	.0722	-.1325	-.1803	-.1594	-.0844
270.000		.8832							.3122						

X/LT .7460 .8530 .9280

PHI

.000	-.0552	-.0955	-.4226												
30.000	-.0484	-.0779	-.4235												
60.000	-.0447	-.0552	-.2521												
90.000	-.0498	-.0700													
120.000	-.0489	-.1101	-.2933												
135.000	-.0473	-.1282	-.3519												
150.000	-.1196	-.2363	-.3044												
165.000	-.0441	-.1451	-.3943												
180.000	-.0496	-.1476	-.4590												

ALPHAT ( 3 ) = -.540 BETAT ( 5 ) = 8.230

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9867	.6656	.2562	-.2255	-.4027	-.3812	-.2703	-.1512	-.1239	-.1638	-.1571	-.1327	-.1103	-.1056	-.1005
30.000			.1526	-.3124	-.4132	-.3589	-.2087	-.0762	-.0378	-.1438	-.1482	-.1079	-.0814	-.0800	-.0686
60.000			.1078	-.3372	-.3543	-.2687	-.0984	.0556	.0635	-.3363	-.2865	-.1576	-.0937	-.0697	-.0591
90.000		.5329	.0927	-.3450	-.3176	-.2081	.0343	.2059	.3700		-.3401	-.0627	-.1436	-.1481	-.1200
120.000			.1170	-.3214	-.3319	-.2484	-.0681	.0967	.1593	-.1755	-.1403	-.1210	-.1560	-.1495	-.1156
135.000								.0351		-.0165		-.1760		-.1736	
150.000			.1765	-.2803	-.3611	-.3037	-.1540	-.0007	.0856	.0812	-.3662	-.3996	-.4073	-.2865	-.1990
165.000				-.2215	-.3538	-.3075	-.1750	-.0431	.0345	.1271	-.0986	-.2119	-.2355	-.2162	-.1393
180.000	.9867	.6897	.3078	-.1734	-.3308	-.2995	-.1586	-.0477	.0475	.1380	.0383	-.1707	-.2810	-.2396	-.1467
270.000		.9750							.3045						

X/LT .7460 .8530 .9280

PHI



(R81742)

EXTERNAL TANK

ARC11-716 1A14 CR+T12+S12M25

ALPHAT( 3 ) = -.540 BETAT ( 5 ) = 8.230

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.0000 -.1079 -.1457 -.4529  
 30.0000 -.0726 -.0966 -.4173  
 60.0000 -.0652 -.0802 -.2626  
 90.0000 -.1114 -.1353  
 120.0000 -.0814 -.1309 -.2807  
 135.0000 -.0786 -.1503 -.3545  
 150.0000 -.1716 -.2682 -.3407  
 165.0000 -.0908 -.1677 -.4161  
 180.0000 -.1172 -.2064 -.4900

ALPHAT( 4 ) = 4.160 BETAT ( 1 ) = -8.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5560 .6380

PHI

.0000 .0822 .0597 -.2696 -.2713 -.2689 -.1385 .0553 -.0547 -.0519 -.0928 -.0553 -.3238 -.4268 -.5173 -.2656  
 30.0000 -.2144 -.2250 -.4520 -.4520 -.3988 -.3771 -.0480 -.0804 -.2641 -.0523 -.2702 -.4275 -.5112 -.2635  
 60.0000 -.0219 -.0697 -.3908 -.3908 -.3953 -.2933 -.0508 -.0751 -.2890 -.2725 -.2315 -.3975 -.5478 -.4426  
 90.0000 .0028 -.0274 -.0429 -.0654 -.0780 -.0478 -.0489 -.0748 -.1385 -.1770 -.3658 -.5607 -.8370  
 120.0000 -.0221 -.0619 -.0757 -.0908 -.0552 -.0686 -.1331 -.3624 -.0903 -.1332 -.3457 -.5723 -.8811  
 135.0000 .0058 -.0695 -.0862 -.0785 -.0524 -.0714 -.2652 -.0879 -.0402 -.3961 -.3173 -.6380 -.8795  
 150.0000 -.0919 -.0997 -.0291 -.0471 -.1303 -.2874 -.0805 -.3039 -.4066 -.2802 -.5948 -.2635  
 165.0000 .0822 .0581 -.2632 -.2609 -.1056 .0500 -.0619 -.2695 -.0896 -.0844 -.3100 -.4168 -.3297 -.5795 -.2673  
 180.0000 -.1180

X/LT .7460 .8530 .9280

PHI

.0000 -.9514 -.8297 -.5565  
 30.0000 -.5934 -.7987 -.5230  
 60.0000 -.5470 -.7853 -.5098  
 90.0000 -.5164 -.4207  
 120.0000 -.4800 -.3830 -.5491  
 135.0000 -.4362 -.3634 -1.0840  
 150.0000 -.3708 -.3541 -1.0140  
 165.0000 -.7837 -.3656 1.1000  
 180.0000 -.8217 -.5824 1.0440



ARC11-716 1A14 01+T12+S12N25

(RB1742)

ALPHAT ( 4 ) = 4.180 BETAT ( 2 ) = -4.110

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0370	.8590	.4414	-.0699	-.2980	-.2877	-.1816	-.0713	-.0322	-.0607	-.0396	-.0321	-.0445	-.0363
30.000				.4908	-.0146	-.2551	-.2450	-.1367	-.0241	-.0046	-.0931	-.0807	-.0410	-.0326	-.0269
60.000				.4851	-.0128	-.2140	-.1802	-.0616	.0877	.1046	-.2763	-.0945	-.0362	-.0379	-.0170
90.000			.8570	.4285	-.0337	-.2218	-.1690	-.0003	.1780	.2915	-.5399	-.0955	-.0871	-.0646	-.0309
120.000				.3437	-.1356	-.2881	-.2469	-.1164	.0023	-.0111	-.2406	-.2420	-.0419	-.0498	.0022
150.000								-.0340		-.0183	-.0722		-.0970		
165.000				.2768	-.1910	-.3342	-.2980	-.1731	-.0405	.0019	.1474	.0388	-.1032	-.1447	-.0472
180.000			.6630	-.2332	-.3541	-.3094	-.1676	-.0410	.0439	.1808	.0671	-.0722	-.1218	-.0978	-.0133
270.000			.6414	.2054	-.2610	-.3593	-.3030	-.0165	.0637	.1827	.0641	-.1340	-.1466	-.0992	-.0391
X/LT	.7460	.8530	.9280						.3252						

PHI

.0000	-.0384	-.0783	-.3975
30.000	-.0221	-.0454	-.3736
60.000	-.0054	-.0012	-.2026
90.000	.0050	.0010	
120.000	.0607	.0383	-.1993
150.000	.0637	.0171	-.2782
165.000	.0208	-.0722	-.0963
180.000	.0521	-.0341	-.3671
180.000	.0325	-.0551	-.4113

ALPHAT ( 4 ) = 4.190 BETAT ( 3 ) = .000

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0590	.8753	.4445	-.0562	-.2921	-.2765	-.1773	-.0582	-.0191	-.0557	-.0492	-.0387	-.0306	-.0259
30.000				.4272	-.0753	-.2953	-.2724	-.1554	-.0311	.0077	-.0942	-.0629	-.0441	-.0346	-.0397
60.000				.3766	-.1177	-.2793	-.2334	-.0830	.0750	.1189	-.2776	-.0948	-.0476	-.0516	-.0325
90.000		.7538		.3138	-.1646	-.2811	-.2038	-.0156	.1764	.3031	-.5050	-.1162	-.1068	-.0806	-.0361
120.000				.2575	-.2144	-.3149	-.2528	-.1073	.0266	.0232	-.2465	-.2455	-.1116	-.0991	-.0736
150.000								-.0064		-.0226			-.1139		-.0788
165.000				.2295	-.2389	-.3442	-.2895	-.1548	-.0161	.0401	.1246	-.1428	-.1466	-.1692	-.1571
180.000		1.0590	.6806	-.2414	-.3529	-.2993	-.1562	-.0212	.0630	.1810	.0043	-.1218	-.1399	-.1111	-.0318
270.000			.7586	.2180	-.2503	-.3508	-.2998	-.1490	-.0163	.0639	.1780	.0732	-.1303	-.1441	-.1009
X/LT	.7460	.8530	.9280						.3053						

PHI

(081748)

EXTERNAL TANK

ARC11-716 1A14 01+712+312425

ALPHAT( 4) = 4.190 BETAT( 3) = .000

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8550 .9200

PHI  
 .000 -.0225 -.0657 -.3615  
 30.000 -.0235 -.0483 -.3836  
 60.000 -.0226 -.0295 -.2328  
 90.000 -.0035 -.0110  
 120.000 .0287 -.0064 -.2254  
 135.000 .0269 -.0249 -.2855  
 150.000 -.0235 -.1030 -.1831  
 165.000 .0269 -.0462 -.3445  
 180.000 .0309 -.0453 -.3720

ALPHAT( 4) = 4.180 BETAT( 4) = 4.120

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1100 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6360

PHI  
 .000 1.0400 .8496 .4223 -.0739 -.3019 -.2939 -.1803 -.0694 -.0329 -.0759 -.0657 -.0393 -.0307 -.0480 -.0379  
 30.000 .3359 -.1475 -.3363 -.3093 -.1826 -.0926 -.0922 .0004 -.0004 -.0981 -.0825 -.0588 -.0578 -.0515 -.0497  
 60.000 .2516 -.2184 -.3357 -.2644 -.1056 .0683 .1251 -.2608 -.1016 -.0493 -.0613 -.0606 -.0511  
 90.000 .6403 .1931 -.2679 -.3169 -.2188 -.0171 .1802 .3266 -.4534 -.1090 -.1126 -.0672 -.0465  
 120.000 .1659 -.2855 -.3255 -.2564 -.0891 .0901 .0607 -.2290 -.2436 -.1667 -.1310 -.0884 -.0396  
 135.000 .1721 -.2920 -.3544 -.2845 -.1401 .0906 .0570 .0923 -.2275 -.3130 -.3188 -.2133 -.1211  
 165.000 .165.000 .6707 .2065 -.2731 -.3633 -.3048 -.1619 -.0260 .0611 .1624 -.0498 -.1594 -.1571 -.1184 -.0603  
 180.000 1.0400 .6707 .2065 -.2626 -.3678 -.3162 -.1642 -.0380 .0517 .1587 .0658 -.1338 -.1540 -.1449 -.0633  
 270.000 .8705 .2972

X/LT .7400 .8550 .9200

PHI  
 .000 -.0419 -.0758 -.3973  
 30.000 -.0387 -.0750 -.3957  
 60.000 -.0426 -.0558 -.2674  
 90.000 -.0801 -.0308  
 180.000 .0001 -.0600 -.2708  
 135.000 -.0139 -.0874 -.3382  
 150.000 -.0813 -.1924 -.2806  
 165.000 -.0099 -.1024 -.3679  
 180.000 -.0152 -.1154 -.4546



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 OR+T12+S12N25

(RB1742)

EXTERNAL TANK

ALPHAT ( 4 ) = 4.180 BETAT ( 5 ) = 0.240

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9708	.7871	.3905	-.1022	-.3309	-.3229	-.2296	-.1186	-.0780	-.1214	-.1078	-.0978	-.0895	-.0810
30.000				.2389	-.2309	-.3969	-.3555	-.2194	-.0864	-.0179	-.1124	-.1064	-.0834	-.0779	-.0782
60.000				.1364	-.3111	-.3775	-.2903	-.1147	.0678	.1356	-.2901	-.1111	-.0613	-.0744	-.0636
90.000			.5122	.0837	-.3449	-.3277	-.2159	-.0045	.1901	.3515	-.3286	-.0771	-.1033	-.0889	-.0992
120.000				.0713	-.3534	-.3348	-.2460	-.0668	.0754	.0916	-.2165	-.2531	-.2164	-.1589	-.0737
135.000								.0307		-.0334	-.1878			-.1602	
150.000				.0912	-.3449	-.3697	-.2935	-.1422	.0016	.0666	.0670	-.3325	-.3916	-.3552	-.1693
165.000					-.3204	-.3857	-.3215	-.1852	.0417	.1233	-.0908	-.2090	-.2232	-.2064	-.1185
180.000		.9708	.5712	.1766	-.2873	-.3882	-.3329	-.1864	.0239	.1143	.0210	-.1666	-.2632	-.2287	-.1315
270.000			.9552						.2866						

X/LT .7480 .6530 .9280

PHI

.000	-.0927	-.1308	-.4342
30.000	-.0711	-.1039	-.4168
60.000	-.0564	-.0622	-.2689
90.000	-.0384	-.0430	
120.000	-.0396	-.0877	-.2934
135.000	-.0477	-.1055	-.3443
150.000	-.1333	-.2281	-.3219
165.000	-.0615	-.1353	-.3914
180.000	-.0921	-.1746	-.4203

ALPHAT ( 5 ) = 8.180 BETAT ( 1 ) = -8.220

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	.9192	.8733	.5037	.0366	-.2576	-.2562	-.1693	-.0733	-.0294	-.0558	-.0579	-.0569	-.0561	-.0564
30.000				.6290	.1325	-.1483	-.1531	-.0712	.0219	.0448	-.0364	-.0131	-.0071	-.0089	-.0030
60.000				.6327	.1481	-.1048	-.0947	.1501	.1857	.1857	-.1362	-.0140	.0422	.0286	.0198
90.000		.8928		.5105	.0336	-.1715	-.1374	.0003	.1457	.2048	-.3055	.0175	-.0148	-.0218	.0093
120.000				.3269	-.1374	-.3191	-.2920	-.2049	-.1236	-.1702	-.2586	-.5377	.0216	.0404	.0237
135.000								-.1537		-.0744		-.0299		.0026	
150.000				.1661	-.2650	-.4129	-.3728	-.2679	-.1043	.1079	-.0178	-.0738	-.1102	-.0865	-.0211
165.000				-.3271	-.4216	-.3692	-.2378	-.1085	-.0208	.1303	.0452	-.0127	-.0774	-.0960	.0101
180.000		.9192	.5301	.0663	-.3651	-.4072	-.3413	-.1765	-.0431	.0258	.1409	.0210	-.1284	-.1408	-.0313
270.000			.4567						.2711						

X/LT .7460 .6530 .9280

PHI

(RB1742)

EXTERNAL TANK

ARC11-716 IAL14 OL+T12+S12N25

ALPHAT( 5) = 8.100 BETAT ( 1) = -8.220

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .0530 .9280

PHI

.000 -.0634 -.1076 -.4091  
 30.000 .0001 -.0291 -.3578  
 60.000 .0353 .0350 -.1899  
 90.000 .0498 .0301  
 120.000 .1138 .1121 -.1509  
 135.000 .1256 .1056 -.2089  
 150.000 .0617 -.0078 -.0196  
 165.000 .0845 .0119 -.3156  
 180.000 .0493 -.0277 -.3792

ALPHAT( 5) = 8.200 BETAT ( 2) = -4.090

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4310 .5030 .5590 .6380

PHI

.000 .9769 .9469 .5498 .0476 -.2189 -.2267 -.1362 -.0321 .0144 -.0118 -.0173 -.0195 -.0132 -.0180 -.0168  
 30.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 60.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 90.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 120.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 135.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 150.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 165.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 180.000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

X/LT .7460 .0530 .9280

PHI

.000 -.0197 -.0560 -.3667  
 30.000 .0060 -.0193 -.3493  
 60.000 .0076 .0068 -.2044  
 90.000 .0262 .0209  
 120.000 .0737 .0681 -.1891  
 135.000 .0816 .0456 -.2612  
 150.000 .0383 -.0488 -.0842  
 165.000 .0732 -.0131 -.3537  
 180.000 .0526 -.0340 -.3944



ARC11-716 IA14 OA+T12+S12M25

(RB1742)

EXTERNAL TANK

ALPHAT ( 5 ) = 8.090 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0010	.9839	.9569	.9346	-.2166	-.2209	-.1325	-.0097	.0290	-.0054	-.0113	-.0025	-.0013	-.0003	.0064
30.000			.9145	.0165	-.2342	-.2305	-.1203	.0085	.0529	-.0278	-.0250	-.0127	-.0127	-.0148	-.0022
60.000			.4006	-.0850	-.2672	-.2314	-.0795	.0993	.1838	-.1394	-.0548	.0068	-.0071	-.0082	-.0103
90.000		.6919	.2703	-.1958	-.3044	-.2364	-.0490	.1299	.2122	-.2582	.0121	-.0539	-.0552	-.0237	
120.000			.1694	-.2832	-.3551	-.2981	-.1582	-.0336	-.0782	-.2336	-.4855	-.1116	-.0809	-.0469	-.0090
135.000								-.0580		-.0234		-.1374		-.0640	
150.000			.1175	-.3216	-.3774	-.3210	-.1815	-.0525	.0040	.0983	-.1261	-.1581	-.1592	-.1284	-.0777
165.000				-.3311	-.3742	-.3228	-.1677	-.0379	.0463	.1578	.0020	-.1048	-.1168	-.0827	-.0193
180.000	1.0010	.5408	.0985	-.3425	-.3833	-.3187	-.1543	-.0289	.0509	.1672	.0778	-.1208	-.1315	-.0735	-.0044
270.000		.7026							.2197						

X/LT .7460 .8530 .9280

PHI

.000	-.0019	-.0391	-.3505
30.000	-.0019	-.0273	-.3537
60.000	-.0111	-.0114	-.2296
90.000	.0095	.0092	
120.000	.0465	.0320	-.2120
135.000	.0458	.0113	-.2803
150.000	-.0072	-.0772	-.1623
165.000	.0499	-.0213	-.3183
180.000	.0545	-.0199	-.3456

ALPHAT ( 5 ) = 8.070 BETAT ( 4 ) = 4.180

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9799	.9334	.9357	.0349	-.2258	-.2278	-.1441	-.0276	.0151	-.0209	-.0265	-.0184	-.0163	-.0200	-.0115
30.000			.4155	-.0675	-.2931	-.2836	-.1685	-.0324	.0317	-.0470	-.0578	-.0422	-.0385	-.0460	-.0363
60.000			.2722	-.1960	-.3341	-.2824	-.1171	.0732	.1796	-.1349	-.0740	-.0139	-.0214	-.0228	-.0196
90.000		.9782	.1542	-.2946	-.3367	-.2564	-.0553	.1362	.2300	-.2464	.0129	-.0472	-.0458	-.0242	
120.000			.0883	-.3463	-.3519	-.2842	-.1206	-.0049	-.0313	-.2229	-.4202	-.1420	-.0956	-.0651	-.0215
135.000								-.0170		-.0235		-.1593		-.0848	
150.000			.0756	-.3609	-.3681	-.2938	-.1497	-.0235	.0358	.0865	-.2359	-.2855	-.2570	-.1816	-.1085
165.000				-.3505	-.3809	-.3137	-.1615	-.0364	.0485	.1542	-.0494	-.1362	-.1274	-.0825	-.0378
180.000	.9799	.5417	.0851	-.3549	-.3950	-.3316	-.1692	-.0318	.0365	.1475	.0705	-.1119	-.1211	-.1038	-.0464
270.000		.8107							.2145						

X/LT .7460 .8530 .9280

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 CR+112+512M25

EXTERNAL TANK

(R81742)

ALPHAT ( 5 ) = 0.070 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9200

PHI

.000 -.0226 -.0331 -.3085  
 30.000 -.0273 -.0321 -.3003  
 60.000 -.0175 -.0218 -.2360  
 90.000 -.0039 -.0086  
 120.000 .0181 -.0250 -.2517  
 135.000 .0097 -.0310 -.3109  
 150.000 -.0362 -.1408 -.2517  
 165.000 .0120 -.0692 -.3452  
 180.000 .0078 -.0829 -.4277

ALPHAT ( 5 ) = 0.060 BETAT ( 5 ) = 0.310

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT

.0000 .0200 .0400 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 .9118 .8765 .5029 .0161 -.2535 -.2614 -.1772 -.0739 -.0316 -.0688 -.0647 -.0688 -.0823 -.0557  
 30.000 .3074 -.1653 -.3647 -.3489 -.2204 -.0869 -.0023 -.0795 -.0929 -.0926 -.0865 -.0786 -.0775  
 60.000 .1312 -.3034 -.4028 -.3273 -.1419 .3349 .1844 -.1334 -.0937 -.0356 -.0325 -.0295 -.0300  
 90.000 .0371 -.3752 -.3533 -.2412 -.0407 .1445 .2664 -.3413 -.0048 -.0421 -.0363 -.0362  
 120.000 .0002 -.3918 -.3401 -.2494 -.0634 .0401 .0274 -.2506 -.4340 -.1666 -.1186 -.1102 -.0615  
 135.000 .0030 -.3911 -.3649 -.2813 -.1280 .0014 .0544 -.0313 -.0313 -.1732 -.1325  
 150.000 .0014 -.3871 -.3846 -.3161 -.1774 -.0390 .0323 -.0696 -.2899 -.3913 -.2852 -.2192 -.1335  
 165.000 .9118 .4639 .0650 .3820 .4270 .3487 .1904 .1252 .0854 .1704 .1921 .1765 .0933  
 180.000 .8992 .0650 .3820 .4270 .3487 .1904 .1252 .0854 .1704 .1921 .1765 .0933  
 270.000 .7400 .8530 .9200 .2116

X/LT .7400 .8530 .9200

PHI

.000 -.0640 -.1082 -.4069  
 30.000 -.0785 -.1033 -.4041  
 60.000 -.0195 -.0347 -.2277  
 90.000 -.0244 -.0195  
 120.000 .0045 -.0439 -.2686  
 135.000 .0168 -.0663 -.3133  
 150.000 .1029 .1983 .2949  
 165.000 .0386 .0949 .3517  
 180.000 .0585 .1409 .4346



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 Q1+T12+S12+Q25

EXTERNAL TANK

(NB1743) ( 14 FEB 74 )

## REFERENCE DATA

XREF = 2.4210 30 FT. XREF = 29.5800 INCHES  
 YREF = 30.7090 INCHES YREF = .0000 INCHES  
 ZREF = 39.7090 INCHES ZREF = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT ( 1 ) = -8.480 BETAT ( 1 ) = -8.190

## SECTION ( 1 ) : EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.6380
PMI	.000	.9337	.5034	.0987	-.3974	-.5334	-.3120	-.1780	-.1142	-.1032	-.1773	-.2346	-.1725	-.1080
30.000				.1943	-.2995	-.4781	-.4378	-.2474	-.2093	-.2425	-.3236	-.3616	-.2022	-.1248
60.000				.3576	-.1363	-.3232	-.2878	-.2307	-.1516	-.2617	-.5541	-.6887	-.8928	-.0066
90.000			.9339	.5455	.0530	-.1631	-.1099	.0230	.1856	.2311		-.5794	-.6042	-.1828
120.000				.6713	.1754	-.0663	-.0516	.0727	.2250	.3165	.0296	.0671	.0238	-.0153
150.000								.1817			.1922	.0112		-.0323
180.000				.6943	.1969	-.0632	-.0807	.0075	.1518	.2280	.3397	.2064	-.0370	-.1679
190.000					.1687	-.1114	-.1065	-.0390	.0979	.1957	.3255	.1667	-.0492	-.1558
200.000		.9337	1.0220	.5789	.1068	-.1611	-.1481	-.0740	.0544	.1707	.2881	.0874	-.1915	-.2299
270.000			.511						.2661					

X/LT .7480 .8530 .9280

## PMI

.000	-.0754	-.1180	-.3731
30.000	-.0970	-.1056	-.3074
60.000	-.0515	-.0826	-.1567
90.000	-.1339	-.2468	
120.000	.0350	-.0725	-.0481
150.000	.0587	-.0865	-.1496
180.000	-.0092	-.1368	-.0137
190.000	-.0001	-.1030	-.3796
180.000	-.0399	-.1386	-.4195

ALPHAT ( 1 ) = -8.380 BETAT ( 2 ) = -4.070

## SECTION ( 1 ) : EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.6380
PMI	.000	1.0090	.5574	.1304	-.3716	-.4531	-.3611	-.1894	-.0777	-.0715	-.1563	-.2378	-.1692	-.0407
30.000				.1787	-.3144	-.5029	-.3924	-.2327	-.1305	-.1547	-.2556	-.3729	-.1973	-.0876
60.000				.2865	-.2143	-.0866	-.0311	-.2008	-.1068	-.2098	-.4737	-.6584	-.3495	-.0167
90.000			.8451	.4310	-.0575	-.2856	-.2046	-.0056	.1724	.2301		-.6368	-.7110	-.0777
120.000				.5664	.0713	-.1932	-.1517	.0122	.1932	.3110	.0208	.0021	-.0682	-.0489
150.000								.1525	.1592	.1592	.1592	-.0580	-.0707	
180.000				.1267	-.1654	-.1406	-.0234	.1341	.2232	.3047	.0272	-.0300	-.2106	-.1507

X/LT .5050



ARC11-716 1A14 Q10718-318M25 (R81743)

ALPHAT (1) = -0.380 BETAT (2) = -4.070

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1760	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1219	-.1656	-.1944	-.0357	.1096	.2070	.3249	.1133	-.1096	-.2100	-.1494	-.0365
180.000	1.0090	1.0220	.6075	.0931	-.1084	-.1737	-.0401	.0976	.1944	.3070	.1032	-.2071	-.2336	-.1495	-.0602
270.000		.6269							.2396						

X/LT .7460 .8530 .9280

PHI	.000	-.0485	-.0963	-.3629
30.000	-.0804	-.0856	-.3441	
60.000	-.0409	-.0563	-.1787	
90.000	-.0654	-.1129		
120.000	.0223	-.1275	-.1201	
135.000	.0203	-.1465	-.2146	
150.000	-.0494	-.2103	-.0951	
165.000	-.0064	-.1559	-.3780	
180.000	-.0258	-.1755	-.4255	

ALPHAT (1) = -0.290 BETAT (3) = .000

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1760	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0340	.5907	.1374	-.3672	-.4458	-.3489	-.1805	-.0673	-.0618	-.1901	-.2304	-.1634	-.0532	-.0176	-.0198
30.000			.1510	-.3492	-.4343	-.3467	-.1831	-.0758	-.0886	-.2127	-.3339	-.2189	-.0820	-.0465	-.0379
60.000			.2115	-.2893	-.4133	-.3055	-.1580	-.0595	-.1472	-.4095	-.6294	-.3658	-.0672	-.0232	-.0180
90.000		.7462	.3166	-.1628	-.3370	-.2344	-.0207	.1709	.2363	-.5103	-.7484	-.2008	-.0665	-.0281	
120.000			.4512	-.0493	-.2684	-.2235	-.0320	.1663	.3077	.0103	-.0604	-.1464	-.1491	-.0808	-.0143
135.000								.1263	.1384	.1384	-.1458	-.1458			
150.000			.5537	.0447	-.2300	-.2011	-.0566	.1093	.2116	.2659	-.1251	-.2159	-.2903	-.1781	-.1135
165.000			.0885	-.2012	-.1827	-.0489	.1001	.2025	.3151	.0397	-.1790	-.2502	-.1441	-.0425	
180.000	1.0340	1.0240	.6137	.0905	-.1899	-.1735	-.0366	.1052	.2070	.3084	.1116	-.1998	-.2639	-.1455	-.0318
270.000		.7401						.2309							

X/LT .7460 .8530 .9280

PHI	.000	-.0419	-.0921	-.3782
30.000	-.0477	-.0851	-.3614	
60.000	-.0336	-.0661	-.2350	
90.000	-.0383	-.0930		
120.000	-.0068	-.1721	-.2293	
135.000	-.0169	-.1907	-.3034	
150.000	-.1055	-.2769	-.2501	



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4881

ARC11-71.6 1A14 CL+T12+S12MS

(081743)

EXTERNAL TANK

ALPHAT (1) = -0.290 BETAT (3) = .000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7400 .8530 .9280

PME

165.000 -.0265 -.1087 -.3505

180.000 -.0180 -.1790 -.3981

ALPHAT (1) = -0.370 BETAT (4) = 4.120

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5090 .5980 .6380

PME

.000 1.0070 .5565 .1311 -.3786 -.4880 -.3628 -.1915 -.0790 -.0738 -.1595 -.2374 -.1562 -.0720 -.0392 -.0418

30.000 .1138 -.3873 -.4037 -.3160 -.1461 -.0367 -.0405 -.1699 -.2933 -.1929 -.0492 -.0284 -.0390

60.000 .1295 -.3596 -.3803 -.2731 -.1073 -.0366 -.0817 -.3453 -.6138 -.3648 -.0458 -.0143 -.0249

90.000 .6288 .1975 -.2902 -.3764 -.2392 -.0121 .1759 .2567 .5942 -.6842 -.1759 -.0481 -.0237

120.000 .3236 -.1699 -.3686 -.2748 -.0670 .1390 .3037 .0151 -.1174 -.1967 -.1777 -.1021 -.0902

150.000 .4901 -.0466 -.3038 -.2608 -.1079 .0630 .0839 .1080 .12206 -.1539

165.000 .0445 -.2429 -.2158 -.0838 .0630 .1792 .2735 -.0071 -.1939 -.2457 -.1498 -.0806

180.000 1.0070 1.0150 .5944 .0881 -.2034 -.1825 -.0458 .0922 .1879 .2910 .1109 -.1871 -.2383 -.1859 -.0824

210.000 .8448 .2187

K/LT .7400 .8530 .9280

PME

.000 -.0314 -.0977 -.3800

30.000 -.0496 -.0928 -.3854

60.000 -.0393 -.0746 -.2647

90.000 .0367 .1068

120.000 -.0494 -.2116 -.3370

150.000 -.0807 -.2279 -.4060

165.000 .1633 .3447 .3591

180.000 -.0629 -.2175 -.4365

210.000 -.0668 -.2090 -.5037

ARC11-716 1A14 01-112-512NES (081743)

ALPHAT(1) = -0.480 BETAT(1) = 0.220

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

Z/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
.000	.9494	.6981	.0916	-.4043	-.5838	-.3874	-.2307	-.1237	-.1070	-.1810	-.2393	-.1731	-.1090	-.0990	-.0741
30.000			.0525	-.4461	-.3829	-.2992	-.1337	-.0249	-.0232	-.1518	-.2736	-.1996	-.0647	-.0579	-.0713
60.000			.0541	-.4302	-.3406	-.2329	-.0676	.0304	-.0369	-.3362	-.5932	-.3412	-.0515	-.0288	-.0401
90.000		.5101	.0925	-.3918	-.3480	-.2216	-.0043	.1823	.2694		-.5880	-.5725	-.1569	-.0496	-.0413
120.000			.1941	-.2867	-.4307	-.3048	-.0910	.1164	.2929	.0048	-.1612	-.2359	-.2221	-.1771	-.1245
150.000								.0376		.0596		-.2997		-.2401	
180.000			.3410	-.1555	-.3926	-.3225	-.1615	.0052	.1439	.1383	-.3829	-.5302	-.5035	-.2979	-.2122
210.000		.9494	.9211	-.0239	-.3001	-.2774	-.1340	.0025	.1245	.1944	-.0827	-.2377	-.2712	-.2514	-.1661
270.000			.9319	.0565	-.2234	-.2163	-.0762	.0416	.1459	.2327	.0817	-.1910	-.3209	-.2830	-.1679
Z/LT	.7480	.8530	.9280												

PHI

.000	-.0790	-.1200	-.3848
30.000	-.0748	-.1054	-.3886
60.000	-.0567	-.0675	-.2332
90.000	-.0722	-.1666	
120.000	-.1106	-.2554	-.3567
150.000	-.1082	-.2360	-.4197
180.000	-.2203	-.3755	-.4139
210.000	-.1292	-.2403	-.4657
270.000	-.1474	-.2805	-.5440

ALPHAT(2) = -4.300 BETAT(2) = -0.210

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

Z/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
.000	1.0170	.6301	.2144	-.2971	-.5490	-.3919	-.2331	-.1170	-.1080	-.1916	-.2104	-.1390	-.0921	-.0908	-.0905
30.000			.3234	-.1548	-.4327	-.4104	-.2471	-.1420	-.1726	-.2856	-.3167	-.1547	-.1116	-.1007	-.0816
60.000			.4662	-.0432	-.3065	-.2666	-.1401	-.0268	-.0952	-.6010	-.5641	-.2033	-.0097	-.0117	-.0209
90.000		.9945	.5865	.0739	-.1834	-.1326	.0490	.2300	.3340		-.5793	-.3272	-.1190	-.0725	-.0320
120.000			.6276	.1227	-.1551	-.1254	.0197	.1755	.2508	-.1146	-.0024	.0234	-.0190	-.0237	.0226
150.000			.5953	.0860	-.1987	-.1863	-.0809	.0842	.1408	.1140	.0087		-.0441		
180.000			.0177	-.2612	-.2453	-.1091	.0336	.1262	.2755	.2791	.1568	-.0524	-.1725	-.1439	-.0476
210.000	1.0170	.9145	.4596	-.0505	-.3036	-.2732	-.1188	.0196	.1238	.2341	.0663	-.1765	-.2185	-.1833	-.0754
270.000		.5687							.3935						
Z/LT	.7480	.8530	.9280												

PHI



DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4083

ARC11-716 IAI4 OR+T12+S12M5 (R81743)

ALPHAT (2) = -4.300 BETAT (1) = -8.210

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9280

PMI

.0000 -.0437 -.1145 -.3781  
 30.0000 -.0437 -.0936 -.3430  
 60.0000 -.0237 -.0116 -.1553  
 90.0000 -.0081 -.1199  
 120.0000 -.0714 .0155 -.0478  
 135.0000 .0743 .0014 -.1361  
 150.0000 .0185 -.0693 .0093  
 165.0000 .0299 -.0413 -.3562  
 180.0000 -.0023 -.0783 -.3980

ALPHAT (2) = -4.280 BETAT (2) = -4.100

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1790 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6360

PMI

.0000 1.0090 .6772 .2394 -.2792 -.4609 -.3759 -.2004 -.0767 -.0895 -.1669 -.1179 -.0641 -.0464 -.0442  
 30.0000 .2982 -.2183 -.4350 -.3723 -.2036 -.0690 -.1049 -.2422 -.2876 -.1516 -.0741 -.0723 -.0360  
 60.0000 .3662 -.1315 -.3903 -.2756 -.1261 -.0028 -.0805 -.4731 -.5639 -.2663 -.0269 -.0147 -.0218  
 90.0000 .9207 .4737 -.0418 -.2630 -.1850 .0234 .2186 .3343 .2369 -.1322 -.0647 -.0365 -.0648 -.0110  
 120.0000 .3294 .0164 -.2270 -.1799 -.0100 .1621 .2369 -.1322 -.0647 -.0365 -.0648 -.0110  
 135.0000 .3434 .0227 -.2401 -.2102 -.0661 .0893 .1815 .2521 .0228 -.0416 -.2023 -.1600 -.0745  
 165.0000 .0323 -.2377 -.2339 -.0892 .0561 .1482 .2785 .0967 .1093 -.2029 -.1481 -.0346  
 180.0000 1.0880 .9305 .4861 -.0335 -.2834 -.2450 -.0873 .0619 .1452 .2656 .0873 -.1380 -.2191 -.1513 -.0631  
 270.0000 .6863 .3650

K/LT .7460 .8330 .9280

PMI

.0300 -.0493 -.0837 -.3612  
 30.0000 -.0479 -.0666 -.3460  
 60.0000 -.0268 -.0255 -.1836  
 90.0000 -.0360 -.0926  
 120.0000 .0319 -.0377 -.0978  
 135.0000 .0321 -.0610 -.1893  
 150.0000 -.0196 -.1241 -.0594  
 165.0000 .0115 -.0832 -.3561  
 180.0000 -.0034 -.1032 -.4099

(RB1743)

EXTERNAL TANK

ARC11-716 IA14 Q47112-812M25

ALPHAT ( 2 ) = -4.000 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.0980	.7012	.2581	-.2836	-.4909	-.3683	-.1861	-.0377	-.0506	-.1422	-.1887	-.1244	-.0554	-.0337	-.0236
30.000			.2702	-.2525	-.4553	-.3443	-.1655	-.0396	-.0492	-.2051	-.2552	-.1553	-.0622	-.0425	-.0366
60.000			.3049	-.2190	-.3768	-.2788	-.1014	.0355	-.0106	-.4007	-.6077	-.2920	-.0132	-.0148	-.0166
90.000		.8033	.3553	-.1615	-.3258	-.2146	.0190	.2206	.3534	-.5525	-.4534	-.0242	-.0258	-.0176	
120.000			.4206	-.0883	-.3015	-.2212	-.0296	.1513	.2502	-.1233	-.1286	-.1312	-.1278	-.0817	-.0263
135.000					-.0435	-.2841	-.2413	-.0815	.1059	.0801	-.1560	-.1560	-.1127		
150.000			.4724		-.0260	-.2823	-.2199	-.0861	.0819	.2207	-.1504	-.1889	-.2723	-.1892	-.1095
165.000			.4939		-.0246	-.2952	-.2505	-.0738	.0993	.2703	.0241	-.1623	-.2382	-.1423	-.0329
180.000	1.3980	.9360							.1594	.2602	.0964	-.1841	-.2406	-.1417	-.0371
270.000		.8021						.0656	.3480						

X/LT .7460 .8530 .9280

PHI

.000	-.0323	-.0725	-.3536
30.000	-.0403	-.0592	-.3321
60.000	-.0287	-.0343	-.2138
90.000	-.0147	-.0373	
120.000	.0065	-.0785	-.1961
135.000	.0045	-.0990	-.2738
150.000	.0660	-.1827	-.1833
165.000	-.0076	-.1167	-.3221
180.000	-.0036	-.1092	-.3699

ALPHAT ( 2 ) = -4.240 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.0690	.6756	.2395	-.2776	-.4757	-.3746	-.2012	-.0752	-.0689	-.1636	-.1964	-.1275	-.0631	-.0489	-.0412
30.000			.2093	-.3074	-.4558	-.3293	-.1512	-.0228	-.0193	-.1940	-.2318	-.1243	-.0667	-.0555	-.0462
60.000			.2066	-.3068	-.3818	-.2627	-.0738	.0629	.0307	-.4379	-.5824	-.2282	-.0575	-.0327	-.0241
90.000		.6853	.2371	-.2665	-.3467	-.2121	.0240	.2270	.3711	-.5486	-.1211	-.0327	-.0587	-.0685	
120.000			.2990	-.2016	-.3562	-.2539	-.0409	.1490	.2587	-.1325	-.1440	-.1305	-.1511	-.0932	-.0458
135.000					-.1332	-.3523	-.2840	-.1048	.0883	.0556	-.1822	-.1822	-.1385		
150.000			.3837		-.0641	-.3195	-.2762	-.1106	.1655	.1836	-.2852	-.3917	-.3941	-.2325	-.1340
165.000			.4848		-.0321	-.2883	-.2524	-.0883	.1463	.2443	-.0305	-.1928	-.2302	-.1459	-.0774
180.000	1.0690	.9336							.1461	.2443	.0893	-.1836	-.2220	-.1851	-.0806
270.000		.9058						.3332							

X/LT .7460 .8530 .9280

PHI

ORIGINAL PAGE IS  
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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81743)

EXTERNAL TANK

ARC11-716 1A14 01+112+312M25

ALPHAT (2) = -4.240 BETAT (4) = 4.103

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT .7460 .8530 .9260

PHI  
 .000 -.0906 -.0619 -.3614  
 30.000 -.0448 -.0712 -.3570  
 60.000 -.0229 -.0386 -.1943  
 90.000 -.0438 -.0988  
 120.000 -.0370 -.1350 -.2886  
 135.000 -.0390 -.1491 -.3582  
 150.000 -.1175 -.2499 -.3260  
 165.000 -.0376 -.1429 -.4093  
 180.000 -.0370 -.1406 -.4840

ALPHAT (2) = -4.260 BETAT (5) = 8.210

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.0050 .6127 .2011 -.3042 -.5317 -.4130 -.2431 -.1250 -.1083 -.1861 -.2108 -.1513 -.0980 -.0907 -.0945  
 30.000 .1275 -.3647 -.4321 -.3318 -.1330 -.0229 -.0089 -.1815 -.2211 -.1268 -.0799 -.0855 -.0722  
 60.000 .1085 -.3868 -.3581 -.2403 -.0558 .0828 .0618 -.4033 -.5277 -.2123 -.0831 -.0638 -.0468  
 90.000 .1222 -.3651 -.3385 -.1936 .0369 .2251 .3914 -.5213 -.0205 -.0333 -.0999 -.1585  
 120.000 .1956 -.3040 -.3909 -.2641 -.0494 .1401 .2533 -.1232 -.1952 -.1746 -.1830 -.1565 -.1168  
 135.000 .2799 -.2224 -.4062 -.3145 -.1393 .0259 .1389 .1276 .3848 -.4888 -.4508 -.2710 -.1823  
 150.000 .165.000 -.1355 -.3707 -.3127 -.1529 .0095 .1043 .1742 -.0954 -.2286 -.2531 -.2390 -.1418  
 160.000 1.0050 .8296 .4502 -.0618 -.3202 -.2864 -.1228 -.0012 .1032 .1883 .0639 -.1858 -.3051 -.2736 -.1532  
 270.000 .9885 .3226

X/LT .7460 .8530 .9260

PHI  
 .000 -.0860 -.1187 -.3842  
 30.000 -.0627 -.0839 -.3581  
 60.000 -.0443 -.0668 -.1748  
 90.000 -.1292 -.1974  
 120.000 -.0876 -.1544 -.2886  
 135.000 -.0773 -.1645 -.3593  
 150.000 -.1129 -.2906 -.3593  
 165.000 -.0867 -.1738 -.4256  
 180.000 -.1108 -.2006 -.5132

ORIGINAL PAGE IS  
 OF POOR QUALITY

ARC11-716 IA14 01+712+512N25 (R81743)

ALPHAT( 3) = -.600 BETAT ( 1) = -6.240

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0330	.7213	.3160	-.2015	-.4804	-.4089	-.2308	-.1094	-.0876	-.1629	-.1856	-.1343	-.1033	-.0822	-.0832
30.000			.4347	-.0779	-.3686	-.3524	-.2048	-.0832	-.1023	-.2344	-.2349	-.1303	-.0894	-.0784	-.0394
60.000			.3470	.0283	-.2381	-.2124	-.0753	.0590	.0234	-.5879	-.5209	-.0783	.0246	.0009	-.0090
90.000		1.0190	.6706	.0906	-.1712	-.1213	.0628	.2453	.3723		-.6171	.0360	.0200	-.0272	-.0248
120.000			.5734	.0658	-.1959	-.1698	-.0240	.1151	.1371	-.1937	-.1065	.0840	.0101	-.0176	.0206
135.000							.0525			.0333		.0353		-.0387	
150.000			.4930	-.0149	-.2744	-.2506	-.1185	.0224	.0666	.2283	.1214	-.0267	-.1643	-.1269	-.0363
165.000				-.0862	-.3366	-.3047	-.1467	-.0105	.0741	.2342	.1245	-.0181	-.1408	-.1444	-.0272
180.000	1.0330	.8237	.3519	-.1519	-.3725	-.3106	-.1358	.0002	.0682	.2256	.0603	-.1507	-.2027	-.1782	-.0669
270.000		.5864													.4431

X/LT .7460 .8530 .9280

PHI

.000	-.5828	-.1115	-.3546
30.000	-.0505	-.0642	-.3218
60.000	-.0072	.0008	-.1621
90.000	.0018	-.0153	
120.000	.0886	.0678	-.0798
135.000	.0944	.0557	-.1498
150.000	.0461	-.0195	-.0042
165.000	.0599	-.0002	-.3365
180.000	.0257	-.0376	-.3827

ALPHAT( 3) = -.600 BETAT ( 2) = -5.150

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0850	.7738	.3429	-.1778	-.4395	-.3802	-.2031	-.0737	-.0561	-.1479	-.1666	-.1094	-.0692	-.0804	-.0906
30.000			.4126	-.1076	-.3843	-.3396	-.1772	-.0531	-.0611	-.2326	-.2105	-.1157	-.0721	-.0618	-.0459
60.000			.4859	-.0422	-.2913	-.2435	-.0793	.0629	.0448	-.6329	-.5349	-.1161	.0125	-.0005	-.0098
90.000		.9474	.5127	-.0040	-.2361	-.1643	.0395	.2375	.3758		-.6435	.0935	.0232	-.0314	-.0433
120.000			.4994	-.0151	-.2594	-.1968	-.0346	.1182	.1528	-.2953	-.1225	.0417	-.0342	-.0580	-.0092
135.000							.0653			.0330		-.0186		-.0742	
150.000			.4576	-.0349	-.3062	-.2592	-.1091	.0385	.0927	.2116	.0895	-.0433	-.1661	-.1153	-.0337
165.000				-.1020	-.3443	-.2935	-.1242	.0196	.0989	.2420	.1085	-.0677	-.1541	-.1411	-.0282
180.000	1.0850	.8366	.3755	-.1437	-.3586	-.2972	-.1109	.0361	.1111	.2340	.0810	-.1323	-.1891	-.1504	-.0311
270.000		.6776													.4212

X/LT .7460 .8530 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1143)

EXTERNAL TANK

ARC11-716 1A14 Q1-T12+S12N25

ALPHAT ( 3 ) = -.800 BETAT ( 2 ) = -5.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

RHI  
.000 -.0455 -.0722 -.3122  
30.000 -.0342 -.0447 -.2975  
60.000 -.0012 .0052 -.1643  
90.000 .0067 .0280  
120.000 .0532 .0266 -.1382  
135.000 .0621 .0112 -.1957  
150.000 .0199 -.0381 -.0396  
165.000 .0464 -.0263 -.3398  
180.000 .0256 -.0518 -.4058

ALPHAT ( 3 ) = -.800 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0780 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5380 .6380

RHI  
.000 1.1100 .7995 .3532 -.1717 -.4172 -.3378 -.1813 -.0528 -.0349 -.1406 -.1485 -.0909 -.0540 -.0316 -.0283  
30.000 .3997 -.1683 -.4009 -.3337 -.1571 -.0216 -.0096 -.2123 -.1835 -.1024 -.0594 -.0494 -.0299  
60.000 .3584 -.1628 -.3516 -.2594 -.0769 .0826 .0863 -.6223 -.5110 -.1580 -.0199 -.0236 -.0181  
90.000 .8187 .3691 -.1437 -.3143 -.2021 .0266 .2350 .3954 .6675 .0820 -.0448 .1215 -.0960  
120.000 .3811 -.1344 -.3263 -.2353 -.0390 .1295 .1838 .3154 -.1473 -.0321 -.0976 -.0982 -.0362  
135.000 .3917 -.1322 -.3390 -.2699 -.0998 .0812 .0812 .0180 -.0817 -.1074  
150.000 .3917 -.1322 -.3390 -.2699 -.0998 .0594 .1248 .1761 -.1563 -.1526 -.2329 -.1887 -.1002  
165.000 .3921 -.1268 -.3394 -.2842 -.1102 .0376 .1242 .2390 .0233 -.1227 -.1855 -.1431 -.0490  
180.000 .8377 .3921 -.1291 -.3465 -.2778 -.0974 .0376 .2331 .0938 -.1462 -.1937 -.1327 -.0326  
270.000 .8193 .3898

X/LT .7480 .8530 .9280

RHI  
.000 -.0248 -.0498 -.3107  
30.000 -.0226 -.0356 -.2914  
60.000 -.0085 -.0091 -.1546  
90.000 -.0259 -.0097  
120.000 .0164 -.0290 -.2069  
135.000 .0188 -.0446 -.2715  
150.000 -.0396 -.1320 -.1904  
165.000 .0148 -.0645 -.3608  
180.000 .0201 -.0615 -.4167



(RB1743)

ARC11-716 IAI4 OA+712+S12N25

EXTERNAL TANK

ALPHAT ( 3 ) = -.850 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0920	.7759	.3436	-.1740	-.4333	-.3788	-.1951	-.0647	-.0477	-.1490	-.1548	-.1066	-.0689	-.0439	-.0379
30.000			.2879	-.2281	-.4325	-.3383	-.1529	-.0141	.0097	-.1876	-.1808	-.1080	-.0701	-.0805	-.0447
60.000			.2573	-.2537	-.3757	-.2800	-.0641	.0962	.1157	-.5642	-.4726	-.1620	-.0425	-.0407	-.0383
90.000		.7089	.2530	-.2482	-.3376	-.2008	.0329	.2418	.4164	-.6264	-.0744	-.0853	-.1571	-.1238	
120.000			.2755	-.2281	-.3507	-.2334	-.0318	.1360	.2075	-.2890	-.1510	-.0727	-.1294	-.1162	-.0586
135.000								.0867	.0045		-.1242		-.1367		
150.000			.3168	-.1974	-.3702	-.2811	-.1033	.0576	.1381	.1448	-.2362	-.3140	-.3544	-.2511	-.1122
165.000				-.1595	-.3763	-.2946	-.1207	.0267	.1207	.2171	-.0323	-.1566	-.1934	-.1381	-.0678
180.000	1.0920	.8446	.3830	-.1380	-.3673	-.2868	-.1132	.0250	.1146	.2202	.0908	-.1466	-.1860	-.1750	-.0688
270.000		.9226													.3775

X/LT .7460 .8530 .9280

PHI

.000	-.0361	-.0622	-.2999
30.000	-.0355	-.0481	-.3150
60.000	-.0224	-.0237	-.1549
90.000	-.0501	-.0564	
120.000	-.0164	-.0763	-.2419
135.000	-.0172	-.0971	-.3234
150.000	-.0860	-.1945	-.2829
165.000	-.0121	-.0997	-.3865
180.000	-.0119	-.0969	-.4733

ALPHAT ( 3 ) = -.590 BETAT ( 5 ) = 8.230

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0300	.7164	.3051	-.2102	-.4804	-.4101	-.2364	-.1124	-.0941	-.1760	-.1844	-.1395	-.1025	-.0936	-.0838
30.000			.2014	-.3054	-.4806	-.3543	-.1671	-.0271	.0082	-.1672	-.1828	-.1257	-.0818	-.0734	-.0661
60.000			.1565	-.3461	-.3663	-.2450	-.0490	.1066	.1229	-.5118	-.4242	-.1643	-.0766	-.0683	-.0515
90.000		.5890	.1408	-.3497	-.3257	-.1802	.0453	.2497	.4400	-.5633	-.0293	-.1319	-.1942	-.1372	
120.000			.1631	-.3223	-.3555	-.2336	-.0243	.1429	.2134	-.2577	-.1858	-.1199	-.1724	-.1719	-.1123
135.000								.0800	-.0027		-.1824		-.1916		
150.000			.2257	-.2769	-.4039	-.2999	-.1146	.0453	.1373	.1198	-.3831	-.3996	-.4350	-.2742	-.1668
165.000				-.2126	-.4103	-.3246	-.1521	-.0063	.0871	.1629	-.0764	-.2080	-.2387	-.2303	-.1231
180.000	1.0300	.7440	.3543	-.1618	-.3855	-.3207	-.1392	-.0240	.0713	.1710	.0602	-.1669	-.2806	-.2566	-.1341
270.000		1.0130													.3681

X/LT .7460 .8530 .9280

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4889

(R81T43)

EXTERNAL TANK

ARC11-716 1A14 OR+T12+S12+25

ALPHAT ( 3 ) = -.990 BETAT ( 5 ) = 8.230

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

K/LT .7460 .8330 .9280

PHI

.000 -.0882 -.1106 -.3489  
 30.000 -.0554 -.0699 -.3214  
 60.000 -.0467 -.0560 -.1767  
 90.000 -.1249 -.1303  
 120.000 -.0540 -.1013 -.2412  
 135.000 -.0544 -.1162 -.3278  
 150.000 -.1379 -.2297 -.3210  
 165.000 -.0657 -.1335 -.3925  
 180.000 -.0842 -.1604 -.4898

ALPHAT ( 4 ) = 4.050 BETAT ( 1 ) = -8.260

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000 1.0200 .8321 .4365 -.0851 -.3849 -.3756 -.2207 -.0868 -.0550 -.1088 -.1254 -.0971 -.0801 -.0807 -.0722  
 30.000 .5615 .5419 -.2986 -.2701 -.1443 -.0186 -.0130 -.1493 -.1188 -.0626 -.0456 -.0462 -.0332  
 60.000 .6215 .1079 -.1813 -.1586 -.0204 .1304 .1417 -.5182 -.2427 -.0330 .0185 .0141 .0100  
 90.000 .9834 .9681 .0776 -.1772 -.1354 .0529 .2293 .3451 .3451 -.6068 -.3943 -.0199 -.0516 -.0261  
 120.000 .4733 -.0281 -.2768 -.2439 -.0349 .0157 .0004 -.1579 -.4205 .0380 .0489 .0120 .0340  
 135.000 .3639 -.1466 -.3806 -.3343 -.1869 -.0552 -.0190 .0075 -.0160  
 150.000 .2282 -.2185 -.4333 -.3535 -.1842 -.0798 .0780 .0336 .1257 -.1147 -.0266  
 165.000 .6984 .5704 .2282 -.2707 -.4250 -.3374 -.1412 -.0116 .0681 .1879 .0351 .1598 -.1760 -.1332 -.0544  
 180.000 .5704 .2282 -.2707 -.4250 -.3374 -.1412 -.0116 .0681 .1879 .0351 .1598 -.1760 -.1332 -.0544

K/LT .7460 .8330 .9280

PHI

.000 -.0780 -.1011 -.3225  
 30.000 -.0230 -.0307 -.2929  
 60.000 .0272 .0395 -.1493  
 90.000 .0202 .0201  
 120.000 .1172 .1211 -.0707  
 135.000 .1281 .1076 -.1354  
 150.000 .0758 .0235 .0150  
 165.000 .0954 .0313 -.3155  
 180.000 .0525 -.0080 -.3623

(RB1743)

EXTERNAL TANK

ARC11-716 IA14 Q1+T18+518N25

ALPHAT ( 4 ) = 3.990 BETAT ( 2 ) = -4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1750	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0780	.8937	.4759	-.0358	-.3569	-.3542	-.1786	-.0406	-.0072	-.0857	-.0866	-.0602	-.0415	-.0333	-.0279
30.000			.5253	-.0030	-.3068	-.2833	-.1349	.0051	.0221	-.1441	-.0965	-.0525	-.0358	-.0305	-.0175
60.000			.5222	-.0024	-.2617	-.2120	-.0462	.1232	.1605	-.5302	-.2143	-.0571	-.0149	-.0161	-.0033
90.000		.8900	.4704	-.0408	-.2690	-.1880	.0226	.2220	.3541		-.6840	-.1196	-.0772	-.0807	-.0433
120.000			.3916	-.1253	-.3257	-.2566	-.0900	.0414	.0367	-.2009	-.4307	-.0367	-.0209	-.0453	-.0032
150.000								.0004	.0091			-.0985		-.0633	
165.000			.3219	-.1877	-.3789	-.3086	-.1520	-.0103	.0311	.1740	.0195	-.1111	-.1407	-.1425	-.0432
180.000	1.0780	.7165	.2499	-.2291	-.3999	-.3232	-.1460	-.0099	.0671	.2033	.0663	-.0873	-.1344	-.1159	-.0076
270.000		.6906		-.2621	-.4073	-.3077	-.1207	.0163	.0905	.2065	.0702	-.1615	-.1666	-.1151	-.0316
X/LT	.7480	.8530	.9280												

PHI

.000	-.0214	-.0481	-.2772												
30.000	-.0062	-.0158	-.2644												
60.000	.0070	.0257	-.1397												
90.000	.0142	.0316													
120.000	.0785	.0764	-.1139												
135.000	.0846	.0578	-.1914												
150.000	.0435	-.0196	-.0429												
165.000	.0772	.0744	-.3466												
180.000	.0580	-.0165	-.3889												

ALPHAT ( 4 ) = 4.000 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0970	.9149	.4825	-.0497	-.3470	-.3204	-.1618	-.0239	.0053	-.0756	-.0798	-.0489	-.0265	-.0239	-.0126
30.000			.4677	-.0663	-.3456	-.3082	-.1397	.0100	.0396	-.1340	-.0956	-.0557	-.0311	-.0269	-.0174
60.000			.4206	-.1112	-.3311	-.2561	-.0999	.1230	.1749	-.4827	-.2071	-.0591	-.0359	-.0329	-.0188
90.000		.8028	.3589	-.1609	-.3298	-.2142	.0144	.2258	.3726		-.7582	-.1388	-.1036	-.0953	-.0467
120.000			.3077	-.1996	-.3551	-.2594	-.0702	.0754	.0810	-.2641	-.3956	-.0896	-.0780	-.0766	-.0097
135.000								.0380	.0001			-.1258		-.0903	
150.000			.2774	-.2336	-.3827	-.2951	-.1195	.0239	.0742	.1493	-.1620	-.1760	-.1930	-.1630	-.0770
165.000				-.2392	-.3944	-.3090	-.1236	.0144	.0898	.2069	.0100	-.1356	-.1594	-.1210	-.0256
180.000	1.0970	.7149	.2661	-.2551	-.3993	-.3104	-.1159	.0152	-.0932	.2049	.0825	-.1560	-.1746	-.1126	-.0109
270.000		.8032													
X/LT	.7480	.8530	.9280												

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4891

ARC11-716 1A14 01-712-512N25

(RB1743)

EXTERNAL TANK

ALPHAT (4) = 4.000 BETAT (3) = .000

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.0099	-.0273	-.2648
30.000	-.0109	-.0142	-.2668
60.000	-.0061	.0075	-.1523
90.000	.0047	.0187	
120.000	.0561	.0329	-.1634
135.000	.0355	.0169	-.2437
150.000	.0021	-.0397	-.1541
165.000	.0301	-.0078	-.3286
180.000	.0562	-.0074	-.3745

ALPHAT (4) = 4.100 BETAT (4) = 4.200

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000	1.0790	.8691	.4619	-.0583	-.3563	-.3409	-.1780	-.0443	-.0111	-.0932	-.0922	-.0661	-.0440	-.0360	-.0302
30.000			.3767	-.1393	-.4017	-.3472	-.1591	-.0111	.0418	-.1280	-.1140	-.0687	-.0504	-.0426	-.0372
60.000			.3020	-.2143	-.3948	-.2752	-.0707	.1152	.1868	-.4302	-.1748	-.0542	-.0580	-.0514	-.0376
90.000		.6907	.2393	-.2625	-.3590	-.2173	.0189	.2283	.3959		-.7323	-.1173	-.1078	-.0940	-.0436
120.000			.2102	-.2899	-.3635	-.2441	-.0486	.0967	.1222	-.2911	-.3449	-.1598	-.1249	-.0988	-.0314
135.000								.0605		-.0186	-.1722			-.1225	
150.000			.2218	-.2873	-.3689	-.2825	-.1039	.0430	.1010	.1248	-.2483	-.3212	-.3218	-.2207	-.1063
165.000				-.2750	-.4138	-.3063	-.1299	.0100	.0996	.1916	-.0454	-.1634	-.1711	-.1247	-.0497
180.000	1.0790	.7169	.2505	-.2645	-.4169	-.3183	-.1353	-.0031	.0745	.1892	.0828	-.1804	-.1599	-.1542	-.0375
270.000		.9106							.3590						

X/LT .7460 .8530 .9280

PHI

.000	-.0260	-.0443	-.2741
30.000	-.0231	-.0341	-.2854
60.000	-.0199	-.0194	-.1847
90.000	-.0057	-.0071	
120.000	.0234	-.0280	-.2228
135.000	.0141	-.0508	-.3152
150.000	-.0467	-.1450	-.2641
165.000	.0127	-.0803	-.3611
180.000	.0133	-.0671	-.4588

(R81743)

EXTERNAL TANK

ARC11-716 1A14 Q1712-312M25

ALPHAT( 4) = 4.130 BETAT( 5) = 0.300

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.0130	.6319	.4345	-.0810	-.3837	-.3768	-.2238	-.0877	-.0377	-.1232	-.1311	-.1026	-.0856	-.0772	-.0704
30.000			.2837	-.2210	-.4772	-.3680	-.1973	-.0476	.0227	-.1224	-.1393	-.0842	-.0754	-.0750	-.0679
60.000			.1819	-.3241	-.4068	-.2823	-.0738	.1117	.1883	-.3763	-.1445	-.0516	-.0760	-.0740	-.0623
90.000			.5637	-.1254	-.3623	-.3351	-.1922	.0393	.4221	-.6350	-.0808	-.1078	-.0940	-.0569	-.0569
120.000			.1148	-.3780	-.3353	-.2146	-.0201	.1216	.1485	-.3103	-.3327	-.2211	-.1723	-.1314	-.0740
135.000								.0774		-.0328	-.2037			-.1806	
150.000			.1343	-.3993	-.3831	-.2737	-.0940	.0496	.1103	.0952	-.3455	-.4099	-.3999	-.2631	-.1502
165.000				-.3228	-.4271	-.3214	-.1429	-.0108	.0764	.1499	-.0838	-.2101	-.2339	-.2173	-.1221
180.000	1.0130	.6237	.2217	-.2848	-.4428	-.3406	-.1556	-.0396	.0425	.1342	.0364	-.1681	-.2700	-.2544	-.1312
270.000		.9976							.3484						

W/LT .7480 .6530 .9280

PMI

.000	-.0744	-.0998	-.3266
30.000	-.0598	-.0702	-.3058
60.000	-.0493	-.0406	-.2079
90.000	-.0194	-.0164	
120.000	-.0278	-.0631	-.2533
135.000	-.0278	-.0780	-.3306
150.000	-.1056	-.2009	-.3076
165.000	-.0434	-.1012	-.3684
180.000	-.3650	-.1387	-.4667

ALPHAT( 5) = 0.140 BETAT( 1) = -0.280

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	.9643	.9191	.5478	.0332	-.2914	-.2768	-.1835	-.0543	-.3065	-.0492	-.0639	-.0601	-.0533	-.0569	-.0326
30.000			.6691	.1555	-.1693	-.1845	-.0801	.0461	.0683	-.0332	-.0172	-.0016	.0048	-.0050	.0044
60.000			.6716	.1660	-.1294	-.1162	.0132	.1793	.2341	-.2558	-.0449	.0520	.0368	.0270	.0297
90.000		.9356	.5539	.0536	-.2058	-.1566	.0178	.1850	.2553	-.4324	-.0136	-.0030	-.0323	-.0044	-.0044
120.000			.3708	-.1225	-.3594	-.3175	-.1832	-.0398	-.1541	-.1945	-.5473	-.0388	.0841	.0399	.0563
135.000								-.1337		-.0462	-.0733			.0140	
150.000			.2408	-.2610	-.4832	-.3876	-.2486	-.1271	-.0977	.1326	-.0371	-.1198	-.0813	-.0894	-.0121
165.000				-.3339	-.4867	-.3821	-.2050	-.0771	.0023	.1638	.0501	-.0416	-.0617	-.1138	.0173
180.000	.9663	.5787	.1153	-.3768	-.4124	-.3240	-.1382	-.0103	.0608	.1677	.0230	-.1590	-.1450	-.1268	-.0282
270.000		.3130							.3331						

W/LT .7480 .6530 .9280

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - I-14A - VOL. 9

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(RB1743)

ARC11-716 IAL4 OL+T12+S12M25

EXTERNAL TANK

ALPHAT ( 3 ) = 0.140 BETAT ( 1 ) = -0.280

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT .7480 .9330 .9280

PMI

.000 -.0513 -.0768 -.2959  
 30.000 .0141 -.0012 -.2994  
 60.000 .0551 .0643 -.1385  
 90.000 .0466 .0272  
 120.000 .1342 .1520 -.0521  
 135.000 .1475 .1482 -.1049  
 150.000 .0911 .0444 .0510  
 165.000 .1092 .0581 -.2834  
 180.000 .0757 .0143 -.3419

ALPHAT ( 3 ) = 0.180 BETAT ( 2 ) = -4.130

SECTION ( 1 ) INTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6360

PMI

.000 1.0210 .9893 .9940 .0685 -.2826 -.2690 -.1444 -.0046 .0414 -.0172 -.0261 -.0196 -.0078 -.0110 -.0022  
 30.000 .6278 .1057 .2231 -.2190 -.0901 .0494 .0902 -.0459 -.0233 .0055 .0080 .0018 .0099  
 60.000 .3669 .0314 .2395 .1975 .0335 .1372 .2355 .0611 .0296 .0139 .0030 .0071  
 90.000 .6386 .4339 .0748 .3059 .2209 .0073 .1766 .2578 .4355 .0496 .0629 .0682 .0181  
 120.000 .2904 .2120 .4009 .3141 .1602 .0598 .1034 .2271 .5962 .1130 .0074 .0096 .0204  
 135.000 .2052 .2981 .4423 .3524 .1929 .0659 .0346 .1366 .0387 .1659 .1306 .1183 .0284  
 150.000 .3422 .4228 .4228 .3340 .1588 .0295 .0480 .1741 .0317 .1050 .1064 .0901 .0052  
 165.000 1.0210 .5899 .1313 .3664 .4156 .3090 .1178 .0070 .0725 .1842 .0750 .1683 .1412 .0982 .0161  
 180.000 .6313 .2995

K/LT .7480 .9330 .9280

PMI

.000 -.0004 -.0240 -.2461  
 30.000 .0238 .0128 -.2421  
 60.000 .0238 .0402 -.1441  
 90.000 .0291 .0284  
 120.000 .0993 .1109 -.0965  
 135.000 .1096 .0971 .1654  
 150.000 .0874 .0182 .0172  
 165.000 .1009 .0338 .3203  
 180.000 .0818 .0129 .3649

ARC11-716 1A14 Q1+712+312M25 (R01743)

ALPHAT( 5) = 0.100 BETAT ( 3) = .000

SECTION ( 1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5360	.6360
PMI															
.000	1.0430	1.0060	.9993	.0730	-.2494	-.2367	-.1233	.0109	.0359	-.0072	-.0148	-.0004	.0002	.0032	.0103
30.000			.5520	.0337	-.2803	-.2647	-.1175	.0334	.0901	-.0403	-.0366	-.0118	-.0042	-.0090	-.0010
60.000			.4427	-.0733	-.3319	-.2375	-.0667	.1330	.2409	-.2909	-.0730	.0103	-.0020	-.0098	-.0132
90.000		.7399	.3183	-.1907	-.3632	-.2477	-.0169	.1755	.2731	-.4238	-.0424	-.0684	-.0655	-.0293	
120.000			.2162	-.2834	-.3886	-.2942	-.1199	-.0385	-.0398	-.2281	-.5925	-.1718	-.0326	-.0460	.0042
135.000							-.0159		-.0568		-.1876			-.0633	
150.000			.1690	-.3307	-.4047	-.3106	-.1439	-.0097	.0309	.1279	-.1537	-.2088	-.1826	-.1420	-.0503
165.000				-.3430	-.4211	-.3080	-.1339	-.0022	.0713	.1852	-.0025	-.1514	-.1343	-.0940	-.0082
180.000	1.0430	.9906	.1452	-.3544	-.4191	-.3037	-.1222	.0010	.0758	.1924	.0850	-.1778	-.1480	-.0809	.0036
270.000		.7482													
K/LT	.7460	.8330	.9280												

PMI

.000	.0132	-.0062	-.2266												
30.000	.0142	.0031	-.2409												
60.000	.0033	.0176	-.1684												
90.000	.0190	.0122													
120.000	.0747	.0651	-.1581												
135.000	.0723	.0466	-.2276												
150.000	.0265	-.0290	-.1290												
165.000	.0740	.0213	-.3099												
180.000	.0799	.0233	-.3521												

ALPHAT( 5) = 0.100 BETAT ( 4) = 4.100

SECTION ( 1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5360	.6360
PMI															
.000	1.0230	.9797	.9770	.0366	-.2826	-.2741	-.1482	-.0269	.0369	-.0228	-.0402	-.0240	-.0104	-.0160	-.0083
30.000			.4620	-.0346	-.3481	-.3212	-.1626	-.0065	.0657	-.0542	-.0799	-.0456	-.0366	-.0399	-.0286
60.000			.3204	-.1939	-.4183	-.3116	-.0985	.1152	.2360	-.2453	-.0933	-.0386	-.0172	-.0232	-.0179
90.000		.6284	.1970	-.2964	-.3834	-.2518	-.0138	.1875	.2907	-.3870	.0012	-.0819	-.0587	-.0143	
120.000			.1378	-.3666	-.3535	-.2596	-.0775	.0359	.0153	-.2141	-.4861	-.1832	-.1046	-.0738	-.0117
135.000								.0236		.0054		-.2087		-.0888	
150.000			.1177	-.3839	-.3836	-.2784	-.1031	.0178	.0661	.1199	-.2358	-.3039	-.2710	-.1862	-.0883
165.000				-.3762	-.3974	-.3025	-.1254	-.0019	.0758	.1763	-.0599	-.1386	-.1455	-.0975	-.0343
180.000	1.0230	.9916	.1281	-.3701	-.4019	-.3169	-.1363	-.0177	.0614	.1739	.0771	-.1392	-.1363	-.1109	-.0482
270.000		.8601													
K/LT	.7460	.8330	.9280												

PMI

DATE 06 JAN 79

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4003

(R81743)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+512M25

ALPHAT (S) = 0.190 BETAT (A) = 4.180

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9200

W/L	CP
.000	-.0065
.005	-.0222
.010	-.2531
.015	-.0149
.020	-.0240
.025	-.2600
.030	-.0143
.035	-.0029
.040	-.1842
.045	.0070
.050	-.0073
.055	.0405
.060	-.0024
.065	-.2174
.070	.0341
.075	-.0174
.080	-.3082
.085	-.0113
.090	-.1128
.095	-.2521
.100	.0326
.105	-.0342
.110	-.3494
.115	.0346
.120	-.0439
.125	-.6309

ALPHAT (S) = 0.280 BETAT (S) = 0.360

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/L	CP
.000	.0000
.005	.0080
.010	.0490
.015	.1130
.020	.1780
.025	.1940
.030	.2150
.035	.2420
.040	.2900
.045	.3440
.050	.3940
.055	.4310
.060	.5050
.065	.5300

W/L	CP
.000	.0000
.005	.0000
.010	.0000
.015	.0000
.020	.0000
.025	.0000
.030	.0000
.035	.0000
.040	.0000
.045	.0000
.050	.0000
.055	.0000
.060	.0000
.065	.0000
.070	.0000
.075	.0000
.080	.0000
.085	.0000
.090	.0000
.095	.0000
.100	.0000
.105	.0000
.110	.0000
.115	.0000
.120	.0000
.125	.0000

X/LT .7400 .8530 .9200

W/L	CP
.000	-.0075
.005	-.0786
.010	-.2969
.015	-.0760
.020	-.0756
.025	-.2977
.030	-.0162
.035	-.3069
.040	-.1500
.045	-.0499
.050	-.0071
.055	.0031
.060	-.0168
.065	-.2271
.070	.0709
.075	-.0313
.080	-.3015
.085	-.0668
.090	-.1411
.095	-.2790
.100	-.0011
.105	-.0591
.110	-.3372
.115	-.0343
.120	-.0965
.125	-.4624



DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4088

ARC11-718 IAI4 CL+T8+SI2MS

EXTERNAL TANK

(081744) (14 FEB 74)

## REFERENCE DATA

REF = 2.4210 36 FT. WHP = 29.9000 INCHES  
 LREF = 30.7090 INCHES WHP = .0000 INCHES  
 REF = 30.7090 INCHES WHP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

MACH = .900 ELEVON = .000  
 RUDDER = .000 SPOON = .000

ALPHAT(1) = -0.990 BETAT(1) = -0.190

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5590	.6360
PHI	.0000	.0026	.0457	.1420	-.3638	-.4672	-.4747	-.0400	-.0608	-.0679	-.1837	-.1930	-.1077	-.0848	-.0810
30.000				.2291	-.2683	-.4040	-.4008	-.1434	-.1567	-.1986	-.4074	-.2427	-.1215	-.1031	-.0734
60.000				.3092	-.1072	-.2613	-.2206	-.2333	-.1203	-.2133	-.5437	-.3659	-.0922	-.0466	-.0034
90.000				.3744	.0769	-.1140	.0611	.0363	.2141	.2739	-.5664	-.7060	-.1309	-.0094	-.0003
120.000				.6962	.1940	-.0297	-.0115	.0895	.2463	.3492	-.0017	.0871	-.0391	-.0269	.0402
150.000									.2008		.2045	.0155		-.0553	
180.000				.7185	.2136	-.0291	-.0255	.0110	.1701	.2495	.3603	.2366	-.0255	-.1990	-.1639
210.000					.2136	-.0694	-.0561	-.0373	.1151	.2173	.3543	.1942	-.0403	-.1929	-.1814
240.000				.9028	1.0270	.6082	.1591	-.1141	-.0661	.0618	.1990	.3215	.1206	-.1715	-.2270
270.000															-.0892
W/LT	.7480	.8530	.9280												

ALPHAT(1) = -0.990 BETAT(2) = -4.080

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5590	.6360
PHI	.0000	1.0350	.9924	.1659	-.3432	-.6385	-.5274	-.1108	-.0272	-.0332	-.1707	-.2738	-.1788	-.0749	-.0364
30.000				.2141	-.2952	-.6023	-.6061	-.1677	-.0813	-.1155	-.3112	-.3479	-.2293	-.1109	-.0823
60.000				.3108	-.1800	-.5039	-.3667	-.1694	-.0651	-.1613	-.4849	-.0772	-.4080	-.1403	.0014
90.000				.6737	.4628	-.0432	-.3550	-.2266	.0179	.2062	-.2726	-.6457	-.7658	-.1784	-.0166
120.000					.5931	.0893	-.2425	-.1865	.0247	.3452	-.0020	.0229	-.0541	-.1376	-.0745
150.000									.1763		.1856	-.0656	-.1087		
180.000				.6618	.3419	-.1950	-.1703	-.0118	.1584	.2531	.3274	.0365	-.0327	-.2639	-.1850
															-.0634

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ARC11-716 IAL14 ON-T12-S12M25 (N81744)

ALPHA(1) = -0.350 BETAT(2) = -4.080

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PMI															
165.000				.1452	-.1980	-.1832	-.0283	.1307	.2349	.3566	.1353	-.1110	-.2401	-.1882	-.0890
180.000			.6363	.1131	-.2230	-.2030	-.0338	.1109	.2232	.3411	.1346	-.2100	-.2904	-.1843	-.0819
270.000			.6804						.2842						

K/LT	.7480	.8530	.9280
PMI			
.000	-.0349	-.0702	-.3181
30.000	-.0375	-.0803	-.2651
60.000	-.0142	-.0366	-.1298
90.000	.0001	-.0689	
120.000	.0486	-.1206	-.0667
135.000	.0477	-.1366	-.1336
150.000	-.0128	-.1872	-.0658
165.000	.0199	-.1330	-.3555
180.000	.0311	-.1466	-.3876

ALPHA(1) = -0.320 BETAT(3) = .020

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.6380
PMI															
.000	1.0390	.6139	.1743	-.3400	-.6286	-.4775	-.10.3	-.0115	-.0218	-.1590	-.2955	-.1780	-.0379	-.0144	-.0021
30.000			.1909	-.3295	-.6167	-.4417	-.1115	-.0218	-.0481	-.2277	-.3806	-.2289	-.0833	-.0433	-.0163
60.000			.2465	-.2653	-.5633	-.2977	-.1024	-.0099	-.0979	-.4077	-.6468	-.4436	-.1200	-.0273	.0138
90.000		.7732	.3520	-.1560	-.4749	-.2285	.0176	.2113	.2848	-.6159	-.7156	-.2302	-.0287	.0193	
120.000			.4600	-.0270	-.3527	-.2509	-.0121	.1589	.3467	.0185	-.0463	-.1314	-.2205	-.1046	.0047
135.000								.1528		.1700	-.1282			-.1643	
150.000			.5801	.0646	-.2744	-.1378	-.0418	.1333	.2476	.2989	-.0968	-.2158	-.4012	-.2241	-.0782
165.000				.1095	-.2313	-.2121	-.0343	.1226	.2334	.3468	.0661	-.1673	-.3041	-.1768	-.0270
180.000	1.0390	1.0480	.6389	.1167	-.2249	-.2009	-.0191	.1254	.2310	.3364	.1438	-.2171	-.3613	-.1916	-.0175
270.000		.7702						.2742							

K/LT	.7480	.8530	.9280
PMI			
.000	-.0230	-.0636	-.3271
30.000	-.0282	-.0924	-.2934
60.000	-.0161	-.0314	-.1315
90.000	.0083	-.0568	
120.000	.0246	-.1418	-.1916
135.000	.0183	-.1654	-.2674
150.000	-.0627	-.2507	-.2305

(R81740)

EXTERNAL TANK

ARC11-716 1A14 OL+712+S12M25

ALPHAT ( 1 ) = -0.520 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

165.000 .0077 -.1638 -.3293  
180.000 .0081 -.1557 -.3676

ALPHAT ( 1 ) = -0.540 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0310	.5893	.1635	-.3469	-.6417	-.5113	-.1161	-.0276	-.0377	-.1691	-.2849	-.1740	-.0693	-.0334	-.0281
30.000			.1499	-.3573	-.6254	-.2821	-.0804	.0392	-.0056	-.1762	-.3414	-.2339	-.0641	-.0319	-.0289
60.000			.1691	-.3397	-.6182	-.2377	-.0540	.0366	-.0402	-.3563	-.6026	-.4504	-.0911	-.0202	-.0062
90.000			.2344	-.2650	-.5681	-.1907	.0256	.2196	.2363	-.5984	-.7500	-.2173	-.0437	.0001	
120.000			.3582	-.1479	-.4696	-.2817	-.0352	.1744	.3448	.0356	-.1075	-.1943	-.2342	-.1430	-.0453
135.000								.1161		.1478		-.2153		-.2094	
150.000			.4838	-.0240	-.3629	-.3131	-.0869	.0936	.2244	.2522	-.2629	-.4221	-.4667	-.2505	-.1106
165.000				.0641	-.2795	-.2365	-.0703	.0892	.2089	.3078	.0207	-.1742	-.2803	-.1888	-.0740
180.000	1.0310	1.0420	.6255	.1027	-.2292	-.2113	-.0340	.1062	.2152	.3135	.1392	-.1811	-.3152	-.2172	-.0769
270.000		.8700							.2613						

X/LT .7460 .8330 .9280

PHI

.000 -0.0356 -0.0709 -.3219  
30.000 -0.0333 -0.0682 -.3259  
60.000 -0.0188 -0.0489 -.1969  
90.000 -0.0108 -0.0908  
120.000 -0.0234 -0.1868 -.3090  
135.000 -0.0363 -0.1951 -.3835  
150.000 -0.1251 -0.3060 -.3588  
165.000 -0.0364 -0.1878 -.4224  
180.000 -0.0403 -0.1804 -.5240

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ARC11-716 IA14 OR-T112+S12M25

(RB1744)

EXTERNAL TANK

ALPHAT(1) = -0.570 BETAT(1) = 0.220

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9770	.5370	.1347	-.3741	-.6597	-.6664	-.1453	-.0639	-.0720	-.1857	-.3136	-.1718	-.1033	-.0787	-.0808
30.000			.0989	-.4002	-.6736	-.2502	-.0765	.0135	.0140	-.1545	-.3432	-.2138	-.0784	-.0483	-.0317
60.000			.0976	-.4036	-.6656	-.1687	-.0289	.0653	.0109	-.3001	-.5919	-.4053	-.0948	-.0221	-.0234
90.000		.5483	.1278	-.3523	-.6441	-.1608	.0320	.2240	.3126	-.5929	-.6319	-.2080	-.0539	-.0340	
120.000			.2350	-.2512	-.5680	-.3451	-.0450	.1530	.3376	.0491	-.1471	-.2499	-.2585	-.2026	-.1360
135.000								.0731	.1224			-.3056		-.2807	
150.000			.3799	-.1193	-.4455	-.4349	-.1322	.0381	.1887	.1891	-.3417	-.5100	-.5391	-.3253	-.1971
165.000			.0039	-.3280	-.3252	-.1269	.0295	.1648	.2335	-.0376	-.1992	-.2754	-.2709	-.1825	
180.000	.9770	.9540	.5990	.0871	-.2480	-.2394	-.0722	.0654	.1740	.2683	.1225	-.1134	-.3233	-.3050	-.1697
270.000		.9587							.2607						

X/LT .7460 .8330 .9280

PHI															
.000	-.0368	-.0929	-.3186												
30.000	-.0397	-.0844	-.3334												
60.000	-.0381	-.0619	-.1984												
90.000	-.0397	-.1664													
120.000	-.0837	-.2008	-.3343												
135.000	-.0845	-.2017	-.3992												
150.000	-.1817	-.3263	-.3912												
165.000	-.0991	-.2088	-.4388												
180.000	-.1254	-.2281	-.5751												

ALPHAT(2) = -4.500 BETAT(1) = -0.230

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0430	.6621	.2494	-.2712	-.5909	-.6346	-.1480	-.0556	-.0607	-.1957	-.2619	-.1803	-.0901	-.0755	-.0731
30.000			.3536	-.1565	-.4970	-.5014	-.2246	-.0920	-.1244	-.4171	-.3461	-.1594	-.1149	-.0909	-.0664
60.000			.4896	-.0235	-.3428	-.2957	-.1289	.0079	-.0479	-.6906	-.6079	-.2578	-.0425	.0101	.0045
90.000		1.0130	.6058	.0896	-.2245	-.1532	.0644	.2584	.3731	-.5929	-.5957	-.1187	-.0893	.0047	
120.000			.6488	.1382	-.1895	-.1506	.0303	.1980	.2642	-.2743	.0034	.0331	-.0378	-.0461	.0256
135.000								.1383	.0974			.0099		-.0778	
150.000			.6195	.1024	-.2312	-.2120	-.0333	.1069	.1684	.2896	.1851	-.0440	-.2012	-.1702	-.0454
165.000			.0430	.0430	-.3000	-.2900	-.0949	.0565	.1507	.2999	.1615	-.0482	-.1801	-.1866	-.0308
180.000	1.0430	.9451	.4935	-.0223	-.3569	-.3307	-.1017	.0386	.1562	.2856	.0914	-.1820	-.2290	-.2107	-.0828
270.000		.6092							.4294						

X/LT .7460 .8330 .9280

PHI

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(R81744)

EXTERNAL TANK

ARC11-716 1A14 01+712+S12M25

ALPHAT ( 2 ) = -4.500 BETAT ( 1 ) = -8.230

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7450 .8530 .9280

PHI

.000	-.0996	-.0851	-.3134
30.000	-.0587	-.0637	-.2777
60.000	.0009	.0195	-.1150
90.000	.0020	-.0356	
120.000	.0925	.0407	.0133
135.000	.0948	.0293	-.0685
150.000	.0445	-.0261	.0556
165.000	.0512	-.0072	-.3098
180.000	.0187	-.0481	-.3488

ALPHAT ( 2 ) = -4.550 BETAT ( 2 ) = -4.120

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0050 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .5580 .6380

PHI

.000	1.1000	.7199	.2782	-.2504	-.5671	-.8210	-.1084	-.0162	-.0184	-.1743	-.2358	-.1507	-.0607	-.0316	-.0290
30.000			.3321	-.1879	-.5261	-.5552	-.1357	-.0304	-.0307	-.3227	-.2972	-.1654	-.0762	-.0655	-.0447
60.000			.4164	-.1066	-.4539	-.2994	-.0879	.0444	.0005	-.5006	-.3789	-.3237	-.0676	-.0094	.0037
90.000		.9258	.4987	-.0237	-.3725	-.1953	.0903	.2563	.3844		-.5749	-.7247	-.1333	-.0288	.0034
120.000		.5556	.5556	.0319	-.3171	-.2031	.0127	.1943	.2765	-.2474	-.0682	-.0530	-.1186	-.1053	.0011
135.000								.1435		.0816		-.0757		-.1400	
150.000			.5687	.0415	-.3147	-.2361	-.0493	.1169	.1901	.2643	.0073	.0388	-.2542	-.2183	-.0808
165.000				.0207	-.3408	-.2636	-.0709	.0862	.1763	.3048	.1092	-.1174	-.2346	-.2095	-.0336
180.000	1.1000	.9392	.5182	-.0142	-.3607	-.2754	-.0680	.0950	.1771	.2963	.1116	-.2151	-.2500	-.1979	-.0379
270.000		.7238													.4097

X/LT .7460 .8530 .9280

PHI

.000	-.0330	-.0594	-.3033
30.000	-.0274	-.0379	-.2718
60.000	.0039	.0089	-.1330
90.000	.0171	.0286	
120.000	.0590	-.0113	-.0407
135.000	.0596	-.0298	-.1182
150.000	.0078	-.0977	-.0053
165.000	.0398	-.0503	-.3307
180.000	.0219	-.0709	-.3557



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TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4901

ALPHAT( 2 ) = -4.240 BETAT ( 3 ) = .000

(RB1744)

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

EXTERNAL TANK

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI	.000	1.1190	.7296	.2635	-.2455	-.5720	-.6242	-.0968	-.0058	-.0074	-.2112	-.1506	-.0448	-.0164	-.0100
30.000			.2997	-.2347	-.5550	-.5645	-.0325	.0093	-.0003	-.2377	-.2511	-.1892	-.0492	-.0297	-.0344
60.000			.3349	-.1947	-.5142	-.2635	-.0321	.0778	.0416	-.4816	-.3470	-.3664	-.0330	-.0165	-.0031
90.000			.8311	.3845	-.1371	-.4710	-.1783	.0331	.2599	.3962	-.5586	-.7010	-.1436	-.0203	.0080
120.000			.4462	-.0725	-.4234	-.2023	.0018	.1887	.2905	-.1928	-.1278	-.1357	-.1912	-.1206	-.0081
135.000								.1379	.0866			-.1470		-.1666	
150.000			.4991	-.0288	-.3878	-.2332	-.0549	.1131	.2023	.2461	-.1433	-.2224	-.3580	-.2483	-.0839
165.000				-.0072	-.3654	-.2457	-.0658	.0893	.1872	.2938	.0321	-.1840	-.2671	-.1968	-.0355
180.000		1.1190	.9590	.3222	-.0084	-.3511	-.2483	-.0536	.1874	.2836	.1115	-.2285	-.3132	-.2030	-.0235
270.000			.8319					.0931	.3979						

X/LT .7480 .8530 .9280

PHI

.000	-.0161	-.0474	-.3032
30.000	-.0228	-.0371	-.2842
60.000	-.0030	-.0086	-.1714
90.000	.0137	-.0064	
120.000	.0339	-.0576	-.1422
135.000	.0239	-.0755	-.2249
150.000	-.0396	-.1552	-.1808
165.000	.0216	-.0874	-.2928
180.000	.0236	-.0809	-.3461

ALPHAT( 2 ) = -4.290 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.6380
PHI	.000	1.0980	.7143	.2794	-.2543	-.5646	-.6255	-.1118	-.0175	-.0212	-.2446	-.1504	-.0809	-.0315	-.0274
30.000			.2488	-.2908	-.5924	-.5587	-.0727	.0320	.0320	-.1830	-.2892	-.1947	-.0548	-.0258	-.0278
60.000			.2462	-.2851	-.5951	-.2388	-.0111	.1134	.0870	-.3730	-.3383	-.3816	-.0487	-.0153	-.0132
90.000			.7233	.2740	-.2439	-.5555	-.1555	.0699	.2680	.4174	-.5419	-.6290	-.1536	-.0109	-.0043
120.000			.3341	-.1796	-.5108	-.2540	.0016	.1873	.3036	-.1233	-.1790	-.1842	-.2226	-.1356	-.0439
135.000								.1270	.0920			-.2141		-.1930	
150.000			.4160	-.1093	-.4573	-.3590	-.0664	.0966	.2058	.2210	-.2789	-.4217	-.4624	-.2798	-.1101
165.000				-.0424	-.0385	-.3410	-.0837	.0672	.1792	.2732	-.0145	-.1842	-.2519	-.1927	-.0822
180.000		1.0980	.9626	.5145	-.0120	-.0599	-.3185	-.0560	.1722	.2711	.1137	-.1922	-.2674	-.2377	-.0845
270.000			.9346					.0695	.3789						

X/LT .7480 .8530 .9280

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+112+312M25

EXTERNAL TANK

(081744)

ALPHAT ( 2 ) = -4.290 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7460 .6530 .9260

PHI

.000 -.0371 -.0594 -.3043  
 30.000 -.0272 -.0497 -.3094  
 60.000 -.0109 -.0205 -.1678  
 90.000 -.0035 -.0452  
 120.000 -.0065 -.1050 -.2379  
 135.000 -.0175 -.1179 -.3393  
 150.000 -.0878 -.2259 -.3105  
 165.000 -.0164 -.1207 -.3906  
 180.000 -.0181 -.1148 -.4968

ALPHAT ( 2 ) = -4.310 BETAT ( 5 ) = 8.220

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0030 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PHI

.000 1.0360 .6536 .2412 -.2744 -.5929 -.6332 -.1362 -.0664 -.0677 -.1974 -.2625 -.1615 -.0973 -.0789 -.0782  
 30.000 .1720 -.3413 -.6332 -.4031 -.0767 .0246 .0320 -.1569 -.3003 -.1768 -.0696 -.0449 -.0325  
 60.000 .1494 -.3572 -.6254 -.1732 .0002 .1237 .1127 -.3307 -.5629 -.3315 -.0421 -.0344 -.0362  
 90.000 .6053 .1634 -.3362 -.6131 -.1265 .0728 .2600 .4349 -.5480 -.4426 -.0629 -.0341 -.0660  
 120.000 .2287 -.2795 -.5899 -.2075 .0019 .1787 .2992 -.0877 -.2329 -.2141 -.2297 -.1736 -.1154  
 135.000 .3208 -.1912 -.5191 -.4991 -.0966 .0555 .1092  
 150.000 .1015 -.4323 -.4432 -.1231 .0217 .1848 .1789 -.3879 -.4839 -.9051 -.2932 -.1719  
 165.000 1.0360 .8728 .4871 -.0352 -.3697 -.3792 -.1026 .1394 .2162 -.0634 -.2189 -.2637 -.1622  
 180.000 1.0180 .1262 .2326 .3641

W/LT .7460 .6530 .9260

PHI

.000 -.0662 -.0896 -.3197  
 30.000 -.0474 -.0621 -.3066  
 60.000 -.0407 -.0495 -.1560  
 90.000 -.0746 -.1257  
 120.000 -.0626 -.1359 -.2803  
 135.000 -.0592 -.1407 -.3597  
 150.000 -.1454 -.2690 -.3536  
 165.000 -.0727 -.1502 -.4035  
 180.000 -.0944 -.1690 -.5328



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4903

ARC11-716 IA14 01+112+S12N25

EXTERNAL TANK

(R81744)

ALPHAT( 3 ) = -.210 BETAT ( 1 ) = -8.240

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0670	.7664	.3588	-.1634	-.5162	-.5519	-.1653	-.0598	-.1718	-.2409	-.1291	-.0908	-.0880	-.0749
30.000				.4736	-.0445	-.4020	-.4137	-.1961	-.0417	-.3386	-.2292	-.1320	-.0877	-.0803	-.0312
60.000				.5761	.0527	-.2843	-.2390	-.0828	.0947	.0824	-.4476	-.1124	.0355	-.0030	-.0121
90.000			1.0380	.6258	.1017	-.2236	-.1433	.0742	.2725	.4108	-.6279	-.1743	-.1159	-.0827	-.0430
120.000				.5883	.0694	-.2565	-.1945	-.0185	.1347	.1570	-.4552	.0753	.0087	-.0377	.0270
135.000								.0684		.0001		.0182		-.0617	
150.000				.5136	-.0096	-.3374	-.3022	-.1103	.0387	.2218	.1329	-.0491	-.1602	-.1497	-.0291
165.000					-.0806	-.4135	-.4107	-.1347	.0084	.0895	.1302	-.0325	-.1360	-.1735	-.0199
180.000		1.0670	.8445	.3796	-.1400	-.4679	-.4354	-.1250	.0131	.2321	.0669	-.1614	-.1952	-.1903	-.0342
270.000			.6246												.4836

X/LT .7460 .8530 .9280

PHI

.0000	-.0824	-.0792	-.2940
30.000	-.0365	-.0376	-.2579
60.000	.0025	.0220	-1202
90.000	-.0257	-.0537	
120.000	.1124	.1078	.0227
135.000	.1186	.0953	-.0594
150.000	.0749	.0309	.0690
165.000	.0861	.0435	-.2932
180.000	.0580	.0040	-.3373

ALPHAT( 3 ) = -.580 BETAT ( 2 ) = -4.120

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1210	.8163	.3830	-.1525	-.5015	-.5590	-.1133	-.0120	-.1521	-.2139	-.1034	-.0553	-.0401	-.0300
30.000				.4393	-.0947	-.4572	-.4987	-.1255	.0030	-.2653	-.2230	-.1220	-.0637	-.0565	-.0344
60.000				.4942	-.0379	-.3986	-.2556	-.0506	.1086	.1095	-.4991	-.1690	.0323	.0055	-.0077
90.000			.9546	.5201	-.0082	-.3584	-.1798	.0632	.2712	.4243	-.6301	-.1015	.0147	-.0321	-.0365
120.000				.5077	-.0169	-.3618	-.2173	-.0103	.1539	.1933	-.3912	.0270	-.0613	-.0891	-.0023
135.000								.0992		.0014		-.0469		-.1162	
150.000				.4778	-.0540	-.4037	-.2845	-.0785	.0771	.2094	.0092	-.0389	-.1866	-.1980	-.0472
165.000					-.0870	-.4389	-.3706	-.0837	.0516	.2611	.0965	-.0826	-.1795	-.1732	-.0181
180.000		1.1210	.8727	.4144	-.1188	-.4656	-.3501	-.0739	.1445	.2535	.0875	-.1822	-.2036	-.1663	-.0489
270.000			.7432												.4579

X/LT .7460 .8530 .9280

PHI



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

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ARC11-716 IA14 CA+T12+S12N25

(RB1744)

EXTERNAL TANK

ALPHAT ( 3 ) = -.580 BETAT ( 2 ) = -4.120

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.0237	-.0377	-.2408
30.000	-.0126	-.0111	-.2311
60.000	.0123	.0317	-.1157
90.000	.0214	.0472	
120.000	.0760	.0551	-.0512
135.000	.0800	.0388	-.1144
150.000	.0421	-.0261	.0083
165.000	.0706	.0089	-.3227
180.000	.0536	-.0139	-.3561

ALPHAT ( 3 ) = -.590 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.1380	.8356	.3887	-.1431	-.4945	-.5484	-.1003	-.0015	.0113	-.1486	-.1836	-.0979	-.0439	-.0247	-.0175
30.000			.3940	-.1414	-.4866	-.5456	-.0887	.0287	.0388	-.2165	-.1878	-.1187	-.0582	-.0460	-.0192
60.000			.3934	-.1383	-.4787	-.3006	-.0281	.1252	.1392	-.5436	-.5082	-.1938	.0050	-.0081	-.0082
90.000		.8325	.4049	-.1247	-.4720	-.1617	.0641	.2755	.4393	-.7270	.0331	.0105	-.1034	-.0877	
120.000			.4132	-.1174	-.4551	-.1918	-.0015	.1865	.2230	-.3266	-.2096	-.0328	-.0829	-.1316	-.0191
135.000								.1161		.0084		-.0887		-.1502	
150.000			.4217	-.1119	-.4431	-.2999	-.0613	.0922	.1576	.1899	-.1587	-.1613	-.2474	-.2276	-.0809
165.000				-.1084	-.4482	-.3866	-.0748	.0691	.1490	.2573	.0185	-.1231	-.1944	-.1917	-.0346
180.000	1.1380	.8672	.4268	-.1145	-.4465	-.3722	-.0628	.0693	.1513	.2493	.0980	-.1667	-.2097	-.1868	-.0155
270.000		.8496													

X/LT .7460 .8530 .9280

PHI

.000	-.0071	-.0213	-.2580
30.000	-.0081	-.0102	-.2241
60.000	.0079	.0184	-.0970
90.000	-.0060	.0214	
120.000	.0407	.0095	-.1538
135.000	.0438	-.0140	-.2262
150.000	-.0097	-.0895	-.1805
165.000	.0411	-.0274	-.3383
180.000	.0458	-.0263	-.3729





ARC11-716 1A14 CR+712+812MS (RB1744)

EXTERNAL TANK

ALPHAT( 3 ) = -.570 BETAT( 3 ) = 0.240

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7480 .8330 .9280

PHI  
 .000 -.0716 -.0804 -.2965  
 30.000 -.0392 -.0458 -.2643  
 60.000 -.0306 -.0319 -.1195  
 90.000 -.1459 -.1196  
 120.000 -.0333 -.0719 -.2136  
 150.000 -.0325 -.0844 -.3077  
 180.000 -.1090 -.1970 -.3102  
 165.000 -.0411 -.0960 -.3729  
 180.000 -.0578 -.1233 -.5096

ALPHAT( 4 ) = 4.100 BETAT( 4 ) = -0.260

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .0000 .0080 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580

PHI  
 .000 1.0330 .8801 .4714 -.0546 -.4183 -.4681 -.1908 -.0489 -.0208 -.1118 -.1869 -.1008 -.0739 -.0882 -.0646  
 30.000 .5888 .0662 -.2993 -.3275 -.1421 .0113 .0222 -.2116 -.1928 -.0751 -.0348 -.0341 -.0266  
 60.000 .6483 .1259 -.2300 -.1927 -.0148 .1597 .1892 -.4944 -.3157 -.0910 .0463 .0298 .0223  
 90.000 1.0190 .5147 .0968 -.2409 -.1666 .0661 .2584 .3870 -.5315 -.1650 .0061 -.0409 -.0237  
 120.000 .5053 -.0078 -.3409 -.2769 -.0807 .0465 .0328 -.1801 -.4907 -.0375 .0862 .0183 .0372  
 150.000 .3972 -.1244 -.4541 -.4211 -.1545 -.0270 -.0021 .0232 .0268 -.1169 -.0904 -.1261 -.0213  
 165.000 .1980 .5561 .5561 .5264 .1444 .0299 .0545 .2175 .0872 .0612 .0795 .1618 .0048  
 180.000 1.0330 .7381 .2625 .2461 .5671 .3917 .1220 .0589 .1037 .2148 .0408 .1746 .1631 .1639 .0427  
 270.000 .6094 .4636

K/LT .7480 .8330 .9280

PHI  
 .000 -.0545 -.0704 -.2564  
 30.000 -.0037 -.0072 -.2292  
 60.000 .0483 .0649 .0937  
 90.000 .0475 .0825  
 120.000 .1378 .1582 .0118  
 150.000 .1497 .1452 .0722  
 180.000 .0945 .0572 .0806  
 165.000 .1148 .0681 .2865  
 180.000 .0760 .0264 .3305



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TABULATED PRESSURE DATA - IAI14A - VOL. 9

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ARC11-716 IAI14 OL7124512N25

EXTERNAL TANK

(RB1744)

ALPHAT ( 4 ) = 4.120 BETAT ( 2 ) = -4.120

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C0

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5380	.6380
PHI															
.000	1.1080	.9264	.5080	-.0272	-.4125	-.4641	-.1269	.0027	.0303	-.0903	-.1263	-.0694	-.0332	-.0248	-.0130
30.000			.5562	.0197	-.3536	-.3928	-.1045	.60	.0661	-.1677	-.1331	-.0767	-.0212	-.0189	-.0031
60.000			.5334	.0216	-.3552	-.2299	-.0201	.1	.2070	-.4461	-.3043	-.1092	.0102	.0080	.0093
90.000		.9309	.4994	-.0200	-.3752	-.1877	.0525	.218	.3970	-.6031	-.2919	-.0402	-.0843	-.0412	
120.000			.4240	-.1015	-.4406	-.2495	-.0324	.0815	.0792	-.2091	-.4530	-.1265	.0116	-.0338	.0047
135.000								.0405	.0250		-.1561			-.0731	
150.000			.3582	-.1629	-.4957	-.3478	-.1012	.0297	.0594	.1946	.0121	-.1129	-.1233	-.1569	-.0273
165.000				-.2047	-.5268	-.3904	-.0909	.0313	.0959	.2278	.0693	-.1152	-.1327	-.1306	.0011
180.000	1.1080	.7517	.2899	-.2381	-.5393	-.3113	-.0672	.0650	.1188	.2278	.0819	-.2061	-.1620	-.1298	-.0176
270.000		.7266						.4372							

K/LT .7480 .8530 .9280

PHI

.000	-.0033	-.0128	-.2021
30.000	.0190	.0205	-.1812
60.000	.0349	.0613	-.0634
90.000	.0402	.0762	
120.000	.1029	.1131	-.0800
135.000	.1141	.0940	-.1269
150.000	.0762	.0205	-.0128
165.000	.1019	.0486	-.3157
180.000	.0840	.0256	-.3443

ALPHAT ( 4 ) = 4.000 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C0

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5380	.6380
PHI															
.000	1.1200	.9417	.5106	-.0237	-.3948	-.4618	-.1080	.0132	.0438	-.0858	-.1156	-.0569	-.0284	-.0147	-.0051
30.000			.4947	-.0427	-.4082	-.4670	-.0873	.0478	.0850	-.1373	-.1261	-.0668	-.0280	-.0241	-.0087
60.000			.4497	-.0835	-.4364	-.3722	-.0201	.1611	.2245	-.4047	-.2705	-.0816	-.0138	-.0233	-.0103
90.000		.8309	.3866	-.1354	-.4744	-.1907	.0575	.2614	.4130	-.6875	-.1887	-.0865	-.1102	-.0600	
120.000			.3414	-.1842	-.5054	-.2264	-.0209	.1137	.1230	-.2726	-.4305	-.1308	-.0591	-.0881	-.0045
135.000								.0783	.0083		-.1621			-.0989	
150.000			.3133	-.2165	-.5432	-.3259	-.0657	.0635	.1067	.1675	-.1724	-.2083	-.2005	-.1855	-.0576
165.000				-.2187	-.5486	-.3505	-.0701	.0501	.1211	.2284	.0075	-.1689	-.1533	-.1490	-.0131
180.000	1.1200	.7473	.2974	-.2267	-.5551	-.3545	-.0540	.0485	.1240	.2269	.0853	-.2161	-.1640	-.1308	-.0030
270.000		.8349						.4162							

K/LT .7480 .8530 .9280

PHI

(RB1744)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+312M25

ALPHAT( 4 ) = 4.000 BETAT ( 3 ) = .010

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7400 .6130 .9200

PMI

.0000 .0070 .0043 -.1949  
 30.0000 .0106 .0132 -.1951  
 60.0000 .0187 .0384 -.0842  
 90.0000 .0250 .0520  
 120.0000 .0772 .0643 -.1162  
 135.0000 .0784 .0492 -.1960  
 150.0000 .0327 -.0289 -.1328  
 165.0000 .0772 .0246 -.3276  
 180.0000 .0867 .0259 -.3813

ALPHAT( 4 ) = 4.040 BETAT ( 4 ) = 4.140

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PMI

.0000 1.1040 .9189 .4949 -.0308 -.4076 -.4669 -.1299 -.0021 .0261 -.1012 -.1396 -.0663 -.0333 -.0222 -.0181  
 30.0000 .4107 .1128 -.4757 -.5362 -.0884 .0372 .0846 -.1155 -.1600 -.0677 -.0346 -.0323 -.0286  
 60.0000 .3353 .1913 -.5341 -.4699 -.0078 .1597 .2365 -.3539 -.2459 -.0692 -.0330 -.0399 -.0286  
 90.0000 .7247 .2778 .2448 -.5661 -.1798 .0719 .2696 .4394 -.7498 -.1506 -.0814 -.1041 -.0574  
 120.0000 .2512 .2738 -.5850 -.1796 .0093 .1442 .1692 -.2877 -.4154 -.1607 -.1065 -.1037 -.0192  
 135.0000 .2600 .2774 -.5816 -.3034 -.0397 .0870 .1424 .1933 -.3235 -.3038 -.2531 -.0915  
 150.0000 .2484 .5727 -.4780 -.0659 .0558 .1295 .2202 -.0463 -.1719 -.1609 -.1434 -.0384  
 165.0000 1.1040 .7515 .2900 .2400 .5369 -.5317 -.0815 .1115 .2126 .0891 -.1944 -.1512 -.1556 -.0479  
 180.0000 .9416 .4008

X/LT .7400 .6530 .9200

PMI

.0000 .0077 -.0131 -.1971  
 30.0000 .0096 -.0057 -.2098  
 60.0000 .0032 .0133 -.1169  
 90.0000 .0079 .0207  
 120.0000 .0435 .0017 -.1914  
 135.0000 .0371 -.0201 -.2858  
 150.0000 .0091 -.1155 -.2438  
 165.0000 .0369 -.0235 -.3480  
 180.0000 .0392 -.0288 -.4631



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TABULATED PRESSURE DATA - IAI14A - VOL. 9

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(R01744)

EXTERNAL TANK

ARC11-716 IAI14 OL+T12+S12M25

ALPMAT( 4 ) = 4.070 BETAT ( 5 ) = 0.300

SECTION ( 1 ) INTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.4510	.5030	.5580	.6380
PHI														
.000	1.0440	.8634	.4897	-.0532	-.4222	-.4700	-.2036	-.0344	-.0287	-.1304	-.1867	-.1023	-.0738	-.0843
30.000			.3225	-.1939	-.5436	-.5961	-.1190	.0043	.0648	-.1027	-.2066	-.0781	-.0629	-.0593
60.000			.2234	-.2990	-.6152	-.3499	-.0164	.1462	.2282	-.3110	-.1850	-.0905	-.0715	-.0535
90.000		.6027	.1634	-.3366	-.6447	-.1298	.0471	.2654	.4637	-.4637	-.7443	-.0801	-.0836	-.0543
120.000			.1551	-.3472	-.6320	-.1405	.0232	.1474	.1936	-.3179	-.3722	-.2163	-.1728	-.0783
150.000								.1112	-.0084	-.0084	-.2019	-.2030		
180.000			.1759	-.3301	-.6277	-.2264	-.0314	.0887	.1494	.1197	-.3678	-.4022	-.3993	-.1363
165.000				-.2979	-.5997	-.4301	-.0777	.0338	.1097	.1790	-.0755	-.2035	-.2197	-.1216
180.000	1.0440	.6635	.2617	-.2592	-.5748	-.5733	-.0961	-.0053	.0880	.1591	.0478	-.1715	-.2416	-.1308
270.000		1.0280							.3698					

W/LT .7460 .8530 .9280

PHI

.000	-.0581	-.6083	-.8371											
30.000	-.0396	-.0415	-.2394											
60.000	-.0354	-.0231	-.1622											
90.000	-.0381	.0035												
120.000	.0001	-.0333	-.2217											
135.000	-.0100	-.0470	-.3090											
150.000	-.0836	-.1727	-.2917											
165.000	-.2236	-.0763	-.3418											
180.000	-.0461	-.1082	-.4789											

ALPMAT( 5 ) = 0.120 BETAT ( 1 ) = -0.270

SECTION ( 1 ) INTERNAL TANK

DEPENDENT VARIABLE CP

W/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.4510	.5030	.5580	.6380
PHI														
.000	.9943	.9478	.5757	.0552	-.3119	-.3669	-.2066	-.0367	.0102	-.0527	-.0921	-.0617	-.0429	-.0427
30.000			.6824	.1768	-.1970	-.2220	-.0871	.0604	.0668	-.0786	-.0452	-.0211	.0094	.0142
60.000			.7015	.1829	-.1655	-.1449	.0174	.2003	.2651	-.3769	-.1713	-.0223	.0622	.0471
90.000		.9672	.5806	.0719	-.2483	-.1811	.0317	.2112	.2929	-.4340	-.2294	.0247	-.0030	.0186
120.000			.4022	-.0972	-.4170	-.3489	-.1791	-.0731	-.1211	-.1551	-.4030	-.1598	.0980	.0531
135.000								-.1052	-.0015	-.0015	-.1532	-.1532		
150.000			.2755	-.2357	-.5449	-.4974	-.2059	-.0968	-.0750	.1707	-.0914	-.1809	-.0350	-.0091
165.000				-.3074	-.6256	-.5884	-.1522	-.0488	.0339	.1852	.0462	-.0865	-.0458	-.1141
180.000	.9943	.6128	.1533	-.3559	-.6334	-.2787	-.1164	.0140	.0933	.1883	.0252	-.1840	-.1376	-.0226
270.000		.5487							.3717					

W/LT .7460 .8530 .9280

PHI

DATE 06 JAN 73 TABULATED MEASURE DATA - 1A14A - VOL. 9

(R01744)

EXTERNAL TANK

ARC11-716 1A14 OR-T12-S12M25

ALPHAT ( 1 ) = 0.120 BETAT ( 1 ) = -0.270

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7400 .0330 .9200

PHI

.000 -.0390 -.0404 -.2234  
30.000 .0296 .0356 -.1034  
60.000 .0710 .1003 -.0369  
90.000 .0937 .1409  
120.000 .1339 .1630 -.0284  
150.000 .1375 .1710 -.0690  
180.000 .0971 .0615 .0314  
210.000 .1153 .0723 -.2964  
240.000 .0798 .0343 -.3454

ALPHAT ( 2 ) = 0.110 BETAT ( 2 ) = -4.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1700 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5300 .6300

PHI

.000 1.0490 1.0197 .6213 .0874 -.2978 -.3525 -.1333 .0206 .0671 -.0140 -.0329 -.0267 -.0092 -.0021 .0067  
30.000 .6543 .1202 -.2590 -.2924 -.0865 .0763 .1198 -.0644 -.0651 -.0081 .0068 .0121 .0230  
60.000 .9935 .0727 -.2001 -.2416 -.0169 .1033 .2761 -.3250 -.1671 .0036 .0242 .0240 .0293  
90.000 .8725 .4981 -.0463 -.3913 -.2441 .0183 .2089 .3013 -.4533 -.2893 -.0266 -.0203 -.0183  
120.000 .3276 -.1796 -.5142 -.3103 -.1220 -.0109 -.0636 -.1767 -.4603 -.1713 .0263 .0086 .0193  
150.000 .2434 -.2788 -.5659 -.4447 -.1314 -.0291 .0013 .1608 -.0600 -.2123 -.1088 -.0913 -.0265  
180.000 .3181 -.6213 -.3198 -.0933 .0064 .0804 .2051 .0435 -.1470 .0056 -.0714 .0086  
210.000 .6231 .1675 .3430 .6326 .2276 .0694 .0331 .0901 .1990 .0769 .2173 .1293 .0846 .0127  
240.000 .6696 .3300

K/LT .7400 .0330 .9200

PHI

.000 .0181 .0120 -.1701  
30.000 .0426 .0529 -.1390  
60.000 .0590 .0052 -.0425  
90.000 .0758 .1274  
120.000 .1106 .1448 -.0924  
150.000 .1293 .1264 -.1413  
180.000 .0894 .0311 -.0330  
210.000 .1155 .0542 -.3394  
240.000 .0943 .0437 -.3410







DATE 08 JAN 75 TABULATED PRESSURE DATA - IA144 - VOL. 9  
ARC.1-716 IA14 OR+112+S12425

(R81744)

EXTERNAL TANK

ALPHAT( 5 ) = 0.150 BETAT ( 4 ) = 4.180

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
.000 .0103 .0104 -.1710  
30.000 .0039 .0064 -.1922  
60.000 -.0008 .0176 -.1421  
90.000 .0239 .0208  
120.000 .0330 .0290 -.1846  
135.000 .0465 .0330 -.2880  
150.000 .0018 -.0898 -.2383  
165.000 .0474 -.0151 -.3493  
180.000 .0413 -.0304 -.4703

ALPHAT( 5 ) = 0.210 BETAT ( 5 ) = 0.360

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI  
.000 .9885 .9534 .5827 .0630 -.3046 -.3600 -.2233 -.0332 .0116 -.0616 -.1064 -.0768 -.0486 -.0430  
30.000 .3683 -.1161 -.4710 -.1889 -.0276 .0622 -.0545 -.1532 -.0981 -.0716 -.0758 -.0661  
60.000 .2231 -.2787 -.6038 -.6495 -.0616 .2732 -.1942 -.1561 -.0344 -.0219 -.0263 -.0201  
90.000 .5421 .1232 -.3784 -.6563 -.1750 .2274 .3602 -.4698 -.1408 -.0380 -.0695 -.0380  
120.000 .0847 -.4016 -.6645 -.1505 .0078 .1128 .1161 -.1768 -.4920 -.2180 -.1329 -.1246 -.0674  
135.000 .0920 .0920 -.6209 -.1765 -.0304 .0668 .1257 .1246 -.3360 -.3041 -.2282 -.1149  
150.000 .3843 -.6541 -.2425 -.0629 .0346 .1022 .1686 -.0943 -.1925 -.1827 -.1895 -.1134  
165.000 .9885 .5525 .1477 .3615 -.6494 -.5429 -.0912 -.0057 .0546 .1432 .0262 .1644 .2263 .1135  
180.000 .9760 .3033

X/LT .7460 .8530 .9280

PHI  
.000 -.0361 -.0419 -.2182  
30.000 -.0441 -.0453 -.2235  
60.000 -.0052 .0195 -.1109  
90.000 -.0027 .0172  
120.000 .0042 -.0035 -.2087  
135.000 .0042 .0210 -.3014  
150.000 -.0828 -.1393 -.2930  
165.000 -.0059 -.0529 -.3615  
180.000 -.0259 -.0871 -.5154

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A144 - VOL. 9

(R81745) ( 21 FEB 74 )

ARC11-716 1A14 01-712+S12N25

EXTERNAL TANK

PARAMETRIC DATA

MACH = .950 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 29.5800 INCHES  
LREF = 38.7090 INCHES YMRP = .0000 INCHES  
BREF = 38.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

ALPHAT ( 1 ) = -0.580 BETAT ( 1 ) = -0.200

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0580	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
30.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
60.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
90.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
120.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
150.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
180.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343
270.000	.0000	.5828	.1655	-.3173	-.4593	-.3246	-.0863	-.1117	-.0701	-.1501	-.3475	-.2656	-.0950	-.0343

X/LT .7480 .8530 .9280

PMI	.0000	-.0222	-.0432	-.2324
30.000	.0000	-.0222	-.0432	-.2324
60.000	.0000	-.0222	-.0432	-.2324
90.000	.0000	-.0222	-.0432	-.2324
120.000	.0000	-.0222	-.0432	-.2324
150.000	.0000	-.0222	-.0432	-.2324
180.000	.0000	-.0222	-.0432	-.2324

ALPHAT ( 1 ) = -0.420 BETAT ( 2 ) = -4.090

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0580	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
30.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
60.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
90.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
120.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
150.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
180.000	.0000	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0893	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031

ARC11-716 1A14 01+712+512N25 (R81745)

ALPHAT ( 1 ) = -0.420 BETAT ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
165.000					.1761	-.2232	-.2811	.0000	.1606	.2756	.3947	.1771	-.0690	-.2859	-.3612	-.0284
180.000	1.0600	1.0760	.6669		.1455	-.2475	-.3016	-.0072	.1348	.2688	.3823	.1805	-.1466	-.2790	-.3772	-.0784
270.000			.6981													.3284

X/LT .7460 .8530 .9280

PHI																
.000		-.0022	-.0186	-.2388												
30.000		-.0002	-.0110	-.1798												
60.000		.0238	.0069	-.0576												
90.000		.0562	-.0099													
120.000		.0956	-.0791	-.0209												
135.000		.0949	-.0973	-.0984												
150.000		.0325	-.1357	-.0347												
165.000		.0614	-.0803	-.3022												
180.000		.0417	-.0892	-.3151												

ALPHAT ( 1 ) = -0.410 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.0790	.6517	.2189	-.2705	-.5866	-.5303	-.1630	-.1630	-.0858	.0485	-.0972	-.3387	-.3714	-.0357	-.0090	.0196
30.000			.2350	-.2679	-.5781	-.6377	-.1646	-.0430	.0245	-.2105	-.4224	-.4493	-.3066	-.1101	-.0617	-.0083
60.000			.2916	-.2234	-.5379	-.5998	-.1176	.0345	-.0410	-.4224	-.7379	-.7066	-.4133	-.2361	-.0597	.0474
90.000		.8107	.3961	-.1134	-.4680	-.5312	.0323	.2634	.3300	.3300	-.7066	-.7066	-.7127	-.2336	-.0867	.0320
120.000			.5166	.0121	-.3707	-.4335	.0367	.2453	.3953	.3318	.0318	-.0044	-.1079	-.2118	-.2882	.0045
135.000								.1982	.2079	.2079	.2079	-.1112	-.1112	-.3480		
150.000			.6166	.1010	-.2942	-.3532	.0037	.1776	.2925	.3407	-.3407	-.0551	-.2117	-.3948	-.4746	-.0676
165.000			.1463	-.2564	-.3188	.0033	.1802	.2753	.3883	.3883	.1074	-.1074	-.1176	-.2336	-.4003	-.0443
180.000	1.0790	1.0770	.6731	.1488	-.2446	-.3035	.0151	.1617	.2741	.3774	.1889	-.1889	-.1831	-.2884	-.4266	-.0474
270.000		.8052								.3174						

X/LT .7460 .8530 .9280

PHI																
.000		.0131	-.0234	-.2556												
30.000		.0069	-.0116	-.2126												
60.000		.0393	.0078	-.0407												
90.000		.0498	-.0241													
120.000		.0737	-.0959	-.1728												
135.000		.0681	-.1121	-.2518												
150.000		.0017	-.1972	-.2409												



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

ARC11-716 IAI4 OI+112+S12N25 (R81745)

ALPHAT ( 1 ) = -0.410 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
165.000 .0539 -.1148 -.3143  
180.000 .0572 -.1066 -.3316

ALPHAT ( 1 ) = -0.530 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .440 .3940 .4510 .5050 .5980 .6380

PHI  
.000 1.0620 .6332 .2154 -.2915 -.5939 -.5482 -.1626 -.0887  
30.000 .5997 -.3053 -.5995 -.5507 -.1537 -.0702  
60.000 .2161 -.2895 -.5920 -.4681 -.1400 .0142  
90.000 .7022 .2827 -.2245 -.5443 -.5654 -.0480 .2822  
120.000 .3994 -.1070 -.4621 -.5274 -.0169 .2226  
135.000 .5212 .0117 -.3667 -.4261 -.0522 .1630  
150.000 .0959 -.2891 -.3534 -.0500 .1391  
165.000 1.0620 1.0720 .6589 .1392 -.2471 -.3166 -.0216 .1249  
180.000 .9077 .3134

X/LT .7460 .8530 .9280

PHI  
.000 -.0049 -.0238 -.2415  
30.000 -.0095 -.0235 -.2486  
60.000 .0210 .0027 -.0821  
90.000 -.0077 -.0794  
120.000 .0116 -.1254 -.2708  
135.000 .0027 -.1331 -.3498  
150.000 -.0684 -.1371 -.3456  
165.000 -.0018 -.1291 -.3913  
180.000 -.0027 -.1271 -.5042

ARC11-716 IA14 CR+T12+S12N25 (RB1745)

EXTERNAL TANK

ALPHAT(1) = -0.380 BETAT(1) = 0.260

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1750	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	1.0040	.5763	.1818	-.3179	-.6075	-.4012	-.1781	-.1159	-.0296	-.1427	-.3431	-.2788	-.0843	-.0381	-.0339
30.000			.1434	-.3408	-.6280	-.2419	-.1585	-.1080	.0108	-.1448	-.3956	-.2431	-.0927	-.0608	-.0381
60.000			.1434	-.3415	-.6246	-.2008	-.1419	-.0770	.0941	-.3204	-.6512	-.3637	-.1625	-.0575	-.0092
90.000		.5913	.1783	-.3151	-.6043	-.2165	-.1161	.2568	.3465		-.7042	-.6444	-.2783	-.0877	-.0500
120.000			.2782	-.2127	-.5427	-.6030	-.0943	.1885	.3916	.1146	-.0894	-.2138	-.2939	-.2812	-.1878
135.000								.1109		.1756		-.2702		-.3432	
150.000			.4188	-.0802	-.4370	-.4924	-.1448	.0738	.2320	.2346	-.2808	-.4662	-.5763	-.3900	-.2219
165.000			.0400	-.3305	-.3901	-.1815	.0577	.2809	.2009	.2809	.0197	-.1629	-.2687	-.3126	-.2132
180.000	1.0040	.9807	.6332	.1209	-.2544	-.3201	-.0844	.0866	.1953	.3097	.1724	-.1426	-.3059	-.3862	-.2188
270.000		.9912							.3081						
X/LT	.7460	.8330	.9280												

ALPHAT(2) = -4.490 BETAT(1) = -0.240

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1750	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PHI															
.000	1.0680	.9968	.2907	-.2251	-.5490	-.6165	-.1572	-.0705	-.0039	-.1447	-.3160	-.2199	-.0716	-.0805	-.0588
30.000			.3953	-.1154	-.4751	-.5433	-.2666	-.0408	-.0735	-.3518	-.4019	-.1965	-.1303	-.0892	-.0109
60.000			.5288	.0146	-.3634	-.4172	-.1106	.0469	.0083	-.6543	-.6345	-.3248	-.0985	.0405	.0275
90.000		1.0440	.6419	.1228	-.2550	-.2998	.0917	.2923	.4172		-.6332	-.6717	-.1430	-.0221	.0360
120.000			.6798	.1710	-.2295	-.2786	.0499	.2297	.2999	-.2428	.0335	.0648	-.0388	-.1250	.0241
135.000								.1659		.0818		.0328		-.1622	
150.000			.5521	.1344	-.2596	-.3134	-.0422	.1310	.1933	.2954	.2188	-.0093	-.2040	-.2639	-.0516
165.000			.0727	-.3131	-.3819	-.0725	.0770	.1793	.1793	.3278	.1952	-.0139	-.1967	-.2778	-.0467
180.000	1.0680	.9731	.5281	.0119	-.3645	-.4274	-.0718	.0508	.1855	.3189	.1300	-.1324	-.2564	-.2865	-.1012
270.000		.6463						.4777							
X/LT	.7460	.8330	.9280												

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1745)

ARC11-716 IA14 Q1+T12+S12N25

EXTERNAL TANK

A' MAT ( 2 ) = -4.493 BETAT ( 1 ) = -9.240

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI	000	30.000	60.000	90.000	120.000	150.000	180.000
	-.0352	-.0421	-.2358				
	-.0302	-.0202	-.1993				
	.0300	.0307	.0608	-.0990			
	.0637	.0425					
	.1219	.0871	.0726				
	.135.000	.1279	.0740	-.0001			
	.150.000	.0755	.0229	.0995			
	.165.000	.0771	.0387	-.2579			
	.180.000	.0414	-.0004	-.2835			

ALPHAT ( 2 ) = -4.380 BETAT ( 2 ) = -4.120

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1250	.7512	.3224	-.2067	-.5319	-.5995	-.1493	-.0444	.0561	-.1059	-.3126	-.0277	-.0170	-.0097
	30.000		.3738	-.1454	-.4952	-.5616	-.1943	.0210	.0149	-.2592	-.3807	-.2388	-.0858	-.0680	-.0269
	60.000		.4548	-.0702	-.4316	-.4974	-.0687	.0962	.0612	-.6015	-.6237	-.3513	-.1601	-.0093	.0357
	90.000		.9803	.5344	.0119	-.3679	-.4365	.0909	.4291	-.6298	-.7130	-.1761	-.0490	.0248	.0248
	120.000		.5913	.0692	-.3258	-.3975	.0643	.2597	.3205	-.1921	-.0410	-.0173	-.1197	-.2003	.0062
	135.000		.6025	.0746	-.3167	-.3870	.0032	.1615	.2279	.2842	.0131	-.0110	-.2668	-.3479	-.0568
	150.000		.5550	.0539	-.3355	-.4118	-.0233	.1244	.2142	.3325	.1305	-.0824	-.2672	-.3441	-.0383
	165.000		.7612	.0222	-.3618	-.4310	-.0260	.1114	.2160	.3260	.1385	-.1705	-.2116	-.3267	-.0752
	180.000							.4555							

X/LT .7460 .8530 .9280

PHI	000	30.000	60.000	90.000	120.000	135.000	150.000	165.000	180.000
	-.0076	-.0168	-.2289						
	.0036	.0096	-.1812						
	.0377	.0549	-.0508						
	.0661	.0715							
	.0958	.0551	-.0022						
	.0985	.0157	-.0646						
	.0487	-.0381	.0331						
	.0741	.0009	-.2963						
	.0534	-.0227	-.3098						

ARC11-716 IA14 01+12+312M25

(RB1745)

EXTERNAL TANK

ALPHAT( 2) = -4.290 BETAT ( 3) = -.020

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.1410	.7671	.3271	-.2024	-.5291	-.5805	-.1447	-.0390	.0701	-.0965	-.3165	-.3087	-.0112	-.0031	.0053
30.000			.3434	-.1955	-.5253	-.5900	-.1490	.0054	.0799	-.1893	-.3283	-.0334	-.0326	-.0326	-.0247
60.000			.3741	-.1578	-.4979	-.5806	-.0762	.1240	.1107	-.5488	-.6164	-.3334	-.1238	-.0336	.0173
90.000		.8640	.4276	-.0955	-.4588	-.5179	.0471	.3126	.4414		-.6325	-.7395	-.2115	-.0634	.0151
120.000			.4858	-.0320	-.4060	-.4769	.0284	.2407	.3401	-.1371	-.1032	-.1104	-.1855	-.2373	.0011
135.000								.1899		.1175		-.1275		-.3164	
150.000			.5375	.0076	-.3732	-.4444	-.0122	.1645	.2462	.2756	-.1228	-.2318	-.3572	-.4309	-.0697
165.000				.0284	-.3569	-.4318	-.0191	.1398	.2255	.3268	.0517	-.1455	-.2374	-.3619	-.0927
180.000	1.1410	.9906	.5599	.0282	-.3580	-.4	-.0118	.1463	.2084	.3187	.1411	-.2126	-.2791	-.3413	-.0423
270.000		.8649							.4344						

X/LT .7460 .8530 .9280

PMI

.000	.0158	-.0015	-.2295
30.000	.0022	.0022	-.2113
60.000	.0374	.0386	-.0721
90.000	.0548	.0363	
120.000	.0744	-.0129	-.1251
135.000	.0713	-.0301	-.2039
150.000	.0143	-.1031	-.1660
165.000	.0627	-.0428	-.3033
180.000	.0636	-.0377	-.3256

ALPHAT( 2) = -4.350 BETAT ( 4) = 4.110

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.000	1.1210	.7477	.3196	-.2060	-.5343	-.6011	-.1501	-.0529	.0322	-.1092	-.3141	-.3000	-.0286	-.0206	-.0131
30.000			.2919	-.2289	-.5560	-.6177	-.1284	-.0489	.0832	-.1396	-.3608	-.3303	-.0305	-.0247	-.0120
60.000			.2862	-.2320	-.5538	-.5701	-.0916	.0406	.1629	-.4773	-.6077	-.3717	-.0791	-.0307	-.0034
90.000		.7564	.3172	-.2044	-.5327	-.4397	-.0285	.2529	.4674		-.6103	-.6929	-.1923	-.0675	-.0115
120.000			.3761	-.1375	-.4850	-.5562	-.0222	.1973	.3551	-.0751	-.1662	-.1735	-.2194	-.2373	-.0624
135.000								.1627		.1300		-.2152		-.2920	
150.000			.4580	-.0659	-.4372	-.5025	-.0643	.1446	.2322	.2611	-.2667	-.4079	-.4589	-.4258	-.1182
165.000				-.0377	-.3903	-.4613	-.0847	.1202	.2190	.3109	.0191	-.1809	-.2572	-.2778	-.1078
180.000	1.1210	.9909	.5502	.0227	-.3602	-.4332	-.0600	.1173	.2049	.3071	.1483	-.2121	-.2850	-.3309	-.1031
270.000		.9636							.4230						

X/LT .7460 .8530 .9280

PMI



(RB1745)

EXTERNAL TANK

ARC11-716 1A14 01+712+S12N25

ALPHAT ( 2 ) = -4.350 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

.000 -.0063 -.0156 -.2283  
30.000 .0019 -.0073 -.2314  
60.000 .0131 .0168 -.1065  
90.000 .0140 -.0156  
120.000 .0242 -.0639 -.2329  
135.000 .0185 -.0739 -.3118  
150.000 -.0371 -.1765 -.2947  
165.000 .0145 -.0712 -.3663  
180.000 .0132 -.0659 -.4842

ALPHAT ( 2 ) = -4.370 BETAT ( 5 ) = 8.260

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .6380

PHI

.000 1.0620 .6912 .2878 -.2273 -.5482 -.6166 -.1581 -.0724 -.0092 -.1551 -.3240 -.2147 -.0673 -.0576 -.0544  
30.000 .2175 -.2845 -.5941 -.3276 -.1263 -.0742 .0165 -.1628 -.2257 -.0636 -.0442 -.0307  
60.000 .1980 -.3037 -.5967 -.1715 -.1037 -.0285 .1349 -.4243 -.6161 -.2771 -.0634 -.0312 -.0273  
90.000 .6452 .2116 -.2853 -.5898 -.1278 -.0827 .0648 .5035 -.6379 -.5028 -.1341 -.0602 -.0600  
120.000 .2726 -.2313 -.5512 -.4188 -.0785 .1153 .3603 -.0287 -.1815 -.2438 -.2513 -.2425 -.1353  
135.000 .3622 -.1490 -.4968 -.5598 -.1021 .0844 .2290 .1318 -.2321 -.3079  
150.000 .0617 -.4279 -.4954 -.1427 .0585 .2583 .2252 -.3295 -.4738 -.5462 -.3554 -.1972  
165.000 .9042 .5231 .0016 -.3720 -.4411 -.1168 .1454 .2657 .1435 -.1709 -.3274 -.3696 -.1976  
180.000 1.0480  
270.000

X/LT .7460 .8530 .9280

PHI

.000 -.0341 -.0398 -.2350  
30.000 -.0112 -.0161 -.2294  
60.000 -.0092 -.0047 -.0928  
90.000 -.0618 -.0979  
120.000 -.0365 -.0954 -.2634  
135.000 -.0367 -.0999 -.3397  
150.000 -.1003 -.2209 -.3444  
165.000 -.0617 -.1077 -.3942  
180.000 -.0848 -.1338 -.5545



(RB1745)

EXTERNAL TANK

ARC11-716 IAI14 CR+T12+S12M25

ALPHAT ( 3 ) = -.810 BETAT ( 1 ) = -8.280

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0850	.7906	.3873	-.1326	-.4835	-.5339	-.2613	-.0256	-.0083	-.1442	-.3020	-.1950	-.0782	-.0780	-.0787
30.000			.9045	-.0129	-.3934	-.4640	-.2520	.0007	-.0096	-.2860	-.2981	-.1629	-.0989	-.0870	-.0908
60.000			.6107	.0887	-.3041	-.3648	-.0434	.1269	.1293	-.5410	-.4811	-.1772	-.0713	.0147	.0272
90.000		1.0690	.6617	.1414	-.2608	-.3218	.1037	.3077	.4521	-.5929	-.6336	-.1340	-.0395	.0241	.0241
120.000			.6310	.1153	-.2865	-.3504	.0060	.1798	.2063	-.3927	-.2149	.1082	.0187	-.0754	.0178
135.000								.1068		-.0489		.0394		-.1095	
150.000			.5594	.0399	-.3475	-.4127	-.1007	.0744	.1082	.2153	.1625	-.0263	-.1644	-.1979	-.0286
165.000				-.0336	-.4140	-.4769	-.1383	.0386	.1177	.2748	.1991	-.0153	-.1404	-.2227	-.0262
180.000	1.0850	.8820	.4232	-.0917	-.4515	-.5137	-.1116	.0200	.1486	.2846	.0943	-.1354	-.1649	-.2231	-.0710
270.000		.6554													.5635

X/LT .7480 .8530 .9250

PHI

.000	-.0461	-.0389	-.2304
30.000	-.0147	.0011	-.1991
60.000	.0900	.0937	-.0567
90.000	.0748	.0759	
120.000	.1475	.1546	.0899
135.000	.1544	.1450	.0157
150.000	.1099	.0841	.1211
165.000	.1159	.0917	-.2332
180.000	.0832	.0510	-.2672

ALPHAT ( 3 ) = -.580 BETAT ( 2 ) = -4.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	.8502	.4235	-.1071	-.4757	-.5346	-.2788	.0105	.0679	-.0866	-.3112	-.1788	-.0176	-.0286	-.0232
30.000			.4777	-.0513	-.4268	-.4984	-.2706	.0808	.0679	-.1975	-.3105	-.1892	-.0900	-.0568	-.0325
60.000			.5310	.0021	-.3793	-.4476	-.0357	.1620	.1687	-.4892	-.4993	-.2165	-.0403	-.0138	.0130
90.000		.9866	.5563	.0290	-.3589	-.4299	.0884	.3200	.4675	-.6542	-.6162	-.1486	-.0564	.0188	.0188
120.000			.5434	.0225	-.3673	-.4395	.0086	.2008	.2393	-.3322	-.2358	-.0001	-.0451	-.1982	-.0033
135.000								.1493		-.0061		.0609		-.1987	
150.000			.5142	-.0128	-.3922	-.4610	-.0798	.1262	.1632	.2142	-.0094	-.0455	-.1625	-.2924	-.0307
165.000				-.0447	-.4156	-.4879	-.0864	.0941	.1645	.2794	.0978	-.0812	-.1575	-.2693	-.0347
180.000	1.1450	.9024	.4519	-.0803	-.4449	-.5104	-.0804	.0834	.1813	.2754	.0978	-.1736	-.1722	-.2041	-.0398
270.000		.7758													.5157

X/LT .7480 .8530 .9280

PHI

.000	-.0461	-.0389	-.2304
30.000	-.0147	.0011	-.1991
60.000	.0900	.0937	-.0567
90.000	.0748	.0759	
120.000	.1475	.1546	.0899
135.000	.1544	.1450	.0157
150.000	.1099	.0841	.1211
165.000	.1159	.0917	-.2332
180.000	.0832	.0510	-.2672



(RB1T45)

**EXTERNAL TANK**

ARC11-716 1A14 QX+T12+S12M25

ALPHAT ( 3 ) =	- .580	BETAT ( 2 ) =	-4.130
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## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

	00/L7	.7460	.8530	.9280
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100,000	0.0001	-0.0019	-0.1911
30,000	0.0103	-0.0298	-0.1802
60,000	0.0480	-0.0777	-0.0635
90,000	0.0764	0.0944	
120,000	0.1178	0.1008	0.4004
135,000	0.1216	0.0918	-0.0330
150,000	0.0815	0.0329	-0.0668
165,000	0.1036	0.0620	-0.2801
180,000	0.0924	0.0337	-0.2917

ALPHAT ( 3 ) =	- .500	BETAT ( 3 ) =	.010
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SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

	0000	.0083	.049C
00/L7			

11

	1.1990	.8672	.4303	-1.006	-.4612	-.3342	-.2565	.0298	-.0903	-.0698	-.3143	-.1942	.0007	-.0097	-.0022
30.000		.4348	-.0972	-.4597	-.3372	-.1589	.0539	.1140	.1352	-.3427	-.1961	.0300	-.0346	-.0128	
60.000		.4372	-.0906	-.4544	-.3233	-.0516	.1593	.2063	.4347	-.5173	-.2526	.0035	-.0060	.0025	
90.000		.8867	.4432	-.0813	-.4493	-.5202	.0409	.3271	.4841	-.7240	-.2436	-.0315	-.0615	-.0303	
120.000			.4506	-.0746	-.4440	-.5150	-.0052	.2037	.2735	-.2607	-.0459	-.1046	-.1909	-.0175	
150.000								.1546		.0382	-.0943		.2331		
180.000			.4600	-.0730	-.4402	-.5046	-.0522	.1352	.2030	.2138	-.1798	-.1915	-.2491	-.3276	-.0787
210.000				-.0641	-.4366	-.5095	-.0589	.0995	.1912	.2700	.0111	-.1345	-.1800	-.2322	-.0440
240.000	1.1990	.9006	.4622	-.0720	-.4416	-.5053	-.0425	.0635	.1759	.2684	.1031	-.2095	-.1962	-.2331	-.0365
270.000		.8820						.4835							

	X/2	
	.7460	.9280
	.0530	

3

	1973	1974	1975	1976	1977
1.000	0.0173	0.0193	-0.1927		
30.000	0.0200	0.0317	-0.1632		
60.000	0.0354	0.0999	-0.0709		
90.000	0.0492	0.0749			
120.000	0.0670	0.0536	-0.0646		
150.000	0.0692	0.0375	-0.1609		
180.000	0.0399	-0.0353	-0.1213		
210.000	0.0636	0.0152	-0.2915		
240.000	0.0645	0.0177	-0.3168		

## ARC11-716 IA14 CL-712-812M5 EXTERNAL TANK (RB1745)

ALPHAT(3) = -.990 BETAT(4) = 4.120

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C=

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI															
.000	1.1410	.0439	.4180	-1.122	-4.733	-5.386	-2.771	.0104	.0639	-.0918	-.3147	-.1757	-.0194	-.0270	-.0222
30.000			.3677	-1.645	-.5063	-.5822	-.1167	-.0125	.1115	-.1054	-.3910	-.1322	-.0189	-.0402	-.0277
60.000			.3361	-1.992	-.5217	-.5347	-.0806	.0579	.2466	-.3834	-.5160	-.2033	-.0345	-.0253	-.0170
90.000		.7785	.3298	-1.996	-.5239	-.5084	-.0355	.2177	.5151	-.7197	-.0002	.0190	-.1106	-.1066	
120.000			.3496	-1.787	-.5154	-.5707	-.0429	.1109	.3008	-.1844	-.2959	-.0916	-.1103	-.2033	-.0418
150.000								.0831		.0702		-.1363		-.2498	
180.000			.3901	-1.195	-.4907	-.5564	-.0718	.0922	.2234	.1982	-.2975	-.3376	-.3583	-.3660	-.0655
190.000				-.1024	-.4698	-.5542	-.1090	.0958	.1941	.2720	-.0240	-.1705	-.1602	-.2363	-.0778
190.000	1.1410	.9037	.4517	-.0820	-.4444	-.5118	-.1268	.1002	.1807	.2556	.1127	-.2182	-.1817	-.2690	-.0858
270.000		.9812							.4696						

K/LT .7480 .8530 .9280

PMI															
.000	.0012	.0024	-.1039												
30.000	.0078	.0176	-.1893												
60.000	.0156	.0369	-.0516												
90.000	-.0170	.0045													
120.000	.0424	-.0062	-.1877												
150.000	.0495	-.0173	-.2704												
180.000	.0042	-.1136	-.2456												
190.000	.0452	-.0179	-.3393												
190.000	.0474	-.0155	-.4513												

ALPHAT(3) = -.990 BETAT(5) = 8.280

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE C=

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PMI															
.000	1.0890	.7895	.3863	-.1361	-.4868	-.5802	-.2783	-.0339	-.0109	-.1533	-.3085	-.2302	-.0721	-.0789	-.0752
30.000			.2855	-.2315	-.5558	-.6230	-.1263	-.0546	.0730	-.1103	-.3920	-.1243	-.0402	-.0495	-.0402
60.000			.2388	-.2745	-.5762	-.2994	-.1077	-.0190	.2316	-.3292	-.4870	-.1457	-.0846	-.0906	-.0420
90.000		.6840	.2225	-.2661	-.5983	-.1447	-.0797	.0763	.5543	-.6364	.0148	-.0308	-.1590	-.1831	
120.000			.2424	-.2619	-.5722	-.1177	-.0642	.0198	.2164	-.1370	-.3223	-.1300	-.1789	-.2247	-.1037
150.000								.0118		.0775		-.2125		-.2533	
180.000			.3001	-.2177	-.5420	-.4412	-.0909	.0150	.2013	.1837	-.3835	-.4020	-.4249	-.3441	-.1567
190.000				-.1532	-.4970	-.5683	-.0920	.0310	.1447	.2219	-.0411	-.2266	-.2241	-.2730	-.1494
190.000	1.0890	.8154	.4215	-.0993	-.4575	-.5316	-.0969	.0332	.1071	.2143	.1094	-.1855	-.2713	-.3172	-.1547
270.000		1.0700													

K/LT .7480 .8530 .9280

PMI



DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4083

(R01745)

EXTERNAL TANK

ARC11-716 IAI4 CR-TIP-SIGNES

ALPHAT( 3 ) = -.990 BETAT ( 5 ) = 0.200

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7400 .0300 .0200

PMI

.0000 -.0300 -.0300 -.2337  
 30.0000 -.0137 -.0100 -.2074  
 60.0000 -.0133 .0043 -.0714  
 90.0000 -.1109 -.0791  
 120.0000 -.0056 -.0333 -.2347  
 150.0000 -.0033 -.0433 -.3016  
 180.0000 -.0460 -.1641 -.3110  
 210.0000 -.0193 -.0803 -.3604  
 240.0000 -.0335 -.0876 -.5239

ALPHAT( 4 ) = 4.070 BETAT ( 1 ) = -0.300

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0000 .0400 .1100 .1700 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5300 .6300

PMI

.0000 1.0700 9010 .9384 -.0130 -.3995 -.4676 -.5516 .0078 .0137 -.1025 -.1708 -.1506 -.0316 -.0508 -.0379  
 30.0000 .6220 .0979 -.3014 -.3755 -.1769 .0400 .0643 -.1943 -.1241 -.1309 -.0213 -.0298 -.0189  
 60.0000 .6798 .1549 -.2468 -.3131 .0056 .1919 .2351 -.4094 -.2980 -.1623 .0999 .0441 .0274  
 90.0000 1.0400 .6487 .1277 -.2764 -.3380 .0669 .2889 .4224 -.4675 -.2227 -.0204 -.0806 -.0128  
 120.0000 .5401 .0238 -.3633 -.4264 -.0801 .0765 .0661 -.2941 -.9027 -.1193 .1319 .0219 .0286  
 150.0000 .4354 -.0839 -.4499 -.5162 -.1761 .0294 .0119 .2051 .0219 -.7406 .0452 -.1396 -.0288  
 180.0000 -.1803 -.5125 -.5799 -.1480 .0023 .0621 .0924 .0924 -.0810 .0590 .1717 -.0103  
 210.0000 1.0700 .7691 .3036 -.2140 -.5371 -.5980 -.1427 .0068 .1150 .2377 .0570 .1766 .1341 .1643 .0461  
 240.0000 .6470 .5455

X/LT .7400 .0300 .0200

PMI

.0000 -.0330 -.0360 -.1927  
 30.0000 .0137 .0344 -.1703  
 60.0000 .0808 .1039 -.0414  
 90.0000 .0563 .0695  
 120.0000 .1734 .2056 .0782  
 150.0000 .1811 .1933 .0101  
 180.0000 .1297 .1126 .1167  
 210.0000 .1426 .1216 .2306  
 240.0000 .1039 .0738 .2706

ARC11-716 IAI4 ON-T12-S12N25 (081749)

ALPHAT( 4) = 4.130 BETAT( 2) = -4.130

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1300	.9570	.9425	.0090	-.3774	-.4560	-.5421	.0648	.0848	-.0464	-.2251	-.1112	-.0172	-.0168	-.0060
30.000			.9083	.0343	-.3420	-.4266	-.5438	.1034	.1200	-.1189	-.1975	-.1599	-.0156	-.0097	.0007
60.000			.8632	.0328	-.3381	-.4129	-.0226	.2100	.2623	-.3574	-.3252	-.2129	.0093	.0216	.0148
90.000		.9991	.9345	.0112	-.3740	-.4486	.0605	.3054	.4369	-.5264	-.5264	-.2834	.0985	-.0504	-.0397
120.000			.4990	-.0671	-.4306	-.5059	-.0540	.1284	.1195	-.2596	-.4762	-.2006	.0387	-.0482	-.0255
150.000							.0842	.0842	.0154			-.2309		-.0786	
180.000			.9949	-.1265	-.4849	-.5516	-.1132	.0660	.0879	.2056	.0105	-.1823	-.0928	-.1705	-.0426
210.000	1.1300	.7822	.3276	-.1732	-.5201	-.5749	-.1017	.0356	.1233	.2391	.0702	-.1394	-.1114	-.1429	-.0166
270.000		.7836		-.2047	-.5271	-.5636	-.0955	.0236	.1353	.2174	.0640	-.2021	-.1428	-.1471	-.0334

W/LT .7480 .8530 .9280

PHI

.000	.0147	.0216	-.1392
30.000	.0309	.0539	-.1213
60.000	.0552	.0960	-.0191
90.000	.0611	.1195	
120.000	.1327	.1590	-.0078
150.000	.1405	.1598	-.0746
180.000	.1081	.0491	.0239
210.000	.1282	.0915	-.2791
270.000	.1054	.0633	-.2955

ALPHAT( 4) = 4.070 BETAT( 3) = -.020

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT	.0000	.0360	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1310	.9799	.9504	.0197	-.3714	-.4524	-.5410	.0810	.1109	-.0258	-.2349	-.1752	.0002	-.0009	-.0058
30.000			.9360	.0700	-.3846	-.4662	-.5938	.1013	.1508	-.0688	-.2448	-.1744	-.0090	-.0130	-.0045
60.000			.4917	-.0420	-.4189	-.4893	-.0727	.1887	.2879	-.3566	-.3421	-.1891	-.0213	-.0037	.0015
90.000		.8715	.4310	-.0938	-.4611	-.5281	-.0187	.3087	.4612	-.6041	-.2901	-.0367	-.0928	-.0828	
120.000			.3830	-.1440	-.4980	-.5683	-.0843	.1220	.1814	-.2529	-.4372	-.1993	-.0271	-.0971	-.0210
150.000							.0654	.0261	.0336			-.2359		-.1233	
180.000			.3562	-.1762	-.5157	-.5825	-.1132	.0261	.1677	.2074	-.1488	-.2499	-.1733	-.2082	-.0638
210.000	1.1310	.7865	.3436	-.1841	-.5160	-.5843	-.1181	.0063	.1778	.2505	.0292	-.2239	-.1315	-.1683	-.0297
270.000		.8717		-.1933	-.5253	-.5797	-.1244	.0059	.1816	.2494	.1066	-.2782	-.1482	-.1506	-.0155

W/LT .7480 .8530 .9280

PHI

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4923

ARC11-716 1A14 01+712+512M25

(081745)

EXTERNAL TANK

ALPHAT(4) = 4.070 BETAT(3) = -C(0)

SECTION (1) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0330 .9200

PMI

.000	.0318	.0467	-.1303
30.000	.0340	.0370	-.1306
60.000	.0414	.0728	-.0195
90.000	.0469	.1076	
120.000	.1101	.1087	-.0783
150.000	.1142	.0946	-.1534
180.000	.0741	.0295	-.1021
210.000	.1020	.0685	-.2016
240.000	.1134	.0800	-.2978

ALPHAT(4) = 4.070 BETAT(4) = 4.130

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/LT .0000 .0060 .0490 .1130 .1780 .1960 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5980

PMI

.000	1.1310	.9530	.5333	.0000	-.3815	-.4584	-.5462	.0590	.0849	-.0537	-.2249	-.1118	-.0181	-.0151	-.0153
30.000			.4544	-.0887	-.4414	-.5175	-.2669	.0407	.1473	-.0565	-.3021	-.0883	-.0151	-.0256	-.0285
60.000			.3785	-.1484	-.5080	-.5598	-.0684	.0685	.2914	-.2615	-.3655	-.1041	-.0390	-.0456	-.0329
90.000		.7634	.3230	-.1998	-.5379	-.5345	-.0645	.1759	.4951		-.7245	-.2048	-.0331	-.0931	-.0581
120.000			.2941	-.2234	-.5576	-.5454	-.0657	.0437	.2708	-.3076	-.4251	-.1411	-.0907	-.1422	-.0323
150.000			.3044	-.2233	-.5634	-.5833	-.0963	.0059		.0151		-.1896		-.1642	
180.000				-.2157	-.5479	-.6122	-.1180	.0037	.1722	.1618	-.2647	-.3072	-.2653	-.2834	-.0798
210.000	1.1310	.7904	.3344	-.1955	-.5375	-.5982	-.1244	.0190	.1644	.2143	-.0366	-.2089	-.1353	-.1491	-.0423
240.000		.9706							.1489	.2174	.0933	-.2721	-.1289	-.1579	-.0632

W/LT .7400 .0330 .9200

PMI

.000	.0166	.0266	-.1341
30.000	.0190	.0334	-.1489
60.000	.0190	.0472	-.0643
90.000	.0366	.0610	
120.000	.0666	.0358	-.1587
150.000	.0618	.0213	-.2515
180.000	.0329	-.0681	-.2244
210.000	.0594	.0166	-.3216
240.000	.0645	.0151	-.4548

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4926

(RB1745)

EXTERNAL TANK

ARC11-716 IA14 CR+T12+312N25

ALPHAT ( 5 ) = 0.220 BETAT ( 1 ) = -0.310

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0490	.1130	.176	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI	.000	1.0280	.9836	.6134	.0932	-.3014	-.3747	-.4457	-.0199	.0395	-.0476	-.1215	-.0766	-.0274
30.000				.7270	.2066	-.2044	-.2784	-.1004	.0824	.1265	-.1054	-.0780	-.0347	.0273
60.000				.7301	.2163	-.1915	-.2554	.0288	.2305	.3098	-.2964	-.1648	-.0595	.0840
90.000				.9980	.6170	.1077	-.2859	-.3402	.2425	.3334	-.4243	-.2564	.0104	.0366
120.000					.4450	-.0552	-.4295	-.1834	-.0410	-.0898	-.1635	-.3942	-.2012	.0791
135.000									-.0710	-.0022	-.2161	.0578	.0805	.0469
150.000									.3232	-.1884	-.5338	-.5963	-.2211	-.0659
165.000									-.2612	-.5921	-.6550	-.1635	-.0557	.0354
180.000									.2015	-.3035	-.6007	-.2690	-.1559	-.0628
270.000									.6570	.5955		.1815	.0445	-.1061
														-.1120
														-.0219

X/LT .7480 .6530 .9280

PHI

.000	-.0131	-.0064	-.1476
30.000	.0532	.0765	-.0893
60.000	.0932	.1408	.0422
90.000	.1137	.1897	
120.000	.1578	.2045	.0007
135.000	.1798	.2058	-.0228
150.000	.1261	.1057	.0950
165.000	.1424	.1129	-.2707
180.000	.1050	.0698	-.3006

ALPHAT ( 5 ) = 0.270 BETAT ( 2 ) = -4.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0380	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PHI	.000	1.0790	1.0480	.5549	.1247	-.2883	-.3648	-.4333	.1081	-.0002	-.1273	-.0286	.0082	.0106	.0116
30.000				.5877	.1586	-.2808	-.3429	-.2800	.1211	.1645	-.0479	-.0374	.0232	.0250	.0298
60.000				.5292	.1044	-.3034	-.3770	.0049	.2280	.3250	-.2491	-.1877	.0562	.0485	.0371
90.000				.9059	.5059	-.0064	-.3962	-.4703	.3432	.3432	-.4234	-.3511	-.0592	-.0239	-.0261
120.000					.3673	-.1381	-.4998	-.5696	-.1235	.0248	-.0307	-.1588	-.3035	.0203	.0162
135.000									-.0042	.0151	-.0022	-.3009	.0014	.0014	.0116
150.000									.2839	-.2335	-.5547	-.6225	-.1491	-.0985	-.0960
165.000									-.2712	-.6000	-.5362	-.1389	-.0544	-.0790	-.0673
180.000									.2157	-.2931	-.5977	-.2287	-.1413	-.0542	-.0015
270.000									.6620	.7058		.1877	.0838	-.1143	-.0867
															-.0227

X/LT .7480 .6530 .9280

PHI

ORIGINAL PAGE IS  
OF POOR QUALITY

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81743)

EXTERNAL TANK

ARC11-716 1A14 01+T12+S12N25

ALPHAT ( 9 ) = 0.270 BETAT ( 2 ) = -4.130

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP  
X/LT .7460 .8530 .9280

PHI  
.000 .0339 .0502 -.0944  
30.000 .0903 .0901 -.0654  
60.000 .0742 .1262 .0388  
90.000 .0931 .1739  
120.000 .1369 .1711 -.0455  
135.000 .1482 .1561 -.0997  
150.000 .1115 .0740 .0021  
165.000 .1329 .0965 -.3054  
180.000 .1113 .0688 -.3133

ALPHAT ( 9 ) = 0.310 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0090 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380  
PHI  
.000 1.0990 1.0640 .6997 .1325 -.2789 -.3602 -.4514 .1038 .1321 .0198 -.1445 .0014 .0164 .0133 .0213  
30.000 .6205 .0965 -.3133 -.3965 -.4541 .1231 .1754 -.0129 -.1586 -.0001 .0068 .0026 .0090  
60.000 .5182 .0017 .3925 -.4625 -.1042 .2134 .3352 -.1949 -.2088 .0033 .0033 .0089 .0081  
90.000 .6120 .3957 .1170 .1582 .1543 .0613 .2669 .3325 .5089 .1742 .0494 .0152  
120.000 .2958 .2150 .5483 .6155 .1462 .0378 .0382 .1920 .5244 .2374 .0323 .0496 .0050  
135.000 .2573 .2612 .5934 .6356 .1590 .0225 .019 .1978 .1281 .2579 .1523 .1569 .0334  
150.000 .2562 .2582 .4801 .1564 .0621 .1439 .2299 .0293 .1991 .1128 .1089 .0019  
165.000 1.0990 .6642 .2274 .2761 .5941 .3652 .1468 .0685 .2212 .1012 .2423 .1284 .1003 .0033  
180.000 .6149 .3572

X/LT .7460 .8530 .9280

PHI  
.000 .0904 .0632 -.0669  
30.000 .0494 .0733 -.1088  
60.000 .0456 .0900 .0556  
90.000 .0787 .0787  
120.000 .1242 .1361 -.0434  
135.000 .1202 .1200 .1312  
150.000 .0923 .0599 .0657  
165.000 .1214 .0949 .2781  
180.000 .1211 .0929 .2988

ORIGINAL PAGE IS  
OF POOR QUALITY



ARC11-716 1A14 01+T12+S12M25 (R01745) EXTERNAL TANK

ALPHAT ( 5 ) = 8.270 BETAT ( 4 ) = 4.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
.000	1.0770	1.0390	.6402	.1200	-.2889	-.3651	-.4576	.0664	.1062	-.0084	-.1276	-.0351	.0074	.0076	.0076
30.000			.5302	.0126	-.3789	-.4765	-.5318	.0735	.1313	-.0115	-.2138	-.0318	-.0034	-.0157	-.0138
60.000			.3969	-.1210	-.4830	-.5518	-.1234	.1340	.3360	-.1573	-.2542	.0129	.0067	-.0124	-.0184
90.000		.7063	.2848	-.2242	-.5591	-.6123	-.1190	.1752	.3778		-.4765	-.0494	-.0441	-.0631	-.0156
120.000			.2236	-.2818	-.5015	-.3834	-.1310	-.0287	.1198	-.1974	-.5032	-.2212	-.0633	-.0911	-.0147
135.000								-.0443		.0236		-.2212		-.1305	
150.000			.2076	-.2993	-.6117	-.2754	-.1367	-.0650	.1271	.1742	-.2162	-.2567	-.2231	-.2172	-.0804
165.000				-.2977	-.6009	-.2246	-.1354	-.0665	.1161	.1996	-.0212	-.1922	-.1181	-.1121	-.0269
180.000	1.0770	.6671	.2184	-.2943	-.5986	-.3321	-.1439	-.0634	.1253	.2004	.0900	-.2246	-.1170	-.0886	-.0430
270.000		.9177							.3482						
X/LT	.7460	.8530	.9280												

SECTION ( 1 ) EXTERNAL TANK

PMI															
.000	.0368	.0510	-.0909												
30.000	.0246	.0474	-.1144												
60.000	.0179	.0512	-.0882												
90.000	.0446	.0512													
120.000	.0757	.0568	-.1431												
135.000	.0678	.0392	-.2465												
150.000	.0347	-.0469	-.2194												
165.000	.0638	.0239	-.3185												
180.000	.0660	.0145	-.4378												

ALPHAT ( 5 ) = 8.240 BETAT ( 5 ) = 8.420

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
.000	1.0170	.9836	.6171	.1017	-.2980	-.3725	-.4190	-.0273	.0335	-.0544	-.1146	-.0997	-.0303	-.0275	-.0307
30.000			.4311	-.0750	-.4470	-.5191	-.5899	.0024	.0942	-.0147	-.2083	-.0959	-.0425	-.0508	-.0580
60.000			.2720	-.2323	-.5591	-.6293	-.1748	.0198	.3364	-.1077	-.2752	-.0317	.0139	-.0066	-.0136
90.000		.5890	.1718	-.3174	-.6157	-.1642	-.1361	-.0462	.4225		-.4807	-.0129	.0202	-.0334	-.0316
120.000			.1363	-.3367	-.6080	-.1524	-.1233	-.0765	.1194	-.1735	-.4899	-.1509	-.1163	-.1494	-.0597
135.000								-.0640		.0118		-.1893		-.1652	
150.000			.1449	-.3485	-.5656	-.1640	-.1260	-.0604	.0316	.0957	-.2436	-.2803	-.2544	-.2437	-.0943
165.000				-.3283	-.6255	-.1712	-.1238	-.0651	.0791	.1399	-.0619	-.1820	-.1548	-.1703	-.0987
180.000	1.0170	.5993	.1961	-.3110	-.6095	-.2849	-.1272	-.0487	.0485	.1455	.0343	-.1924	-.1555	-.2162	-.1078
270.000		1.0070							.3437						
X/LT	.7460	.8530	.9280												

SECTION ( 1 ) EXTERNAL TANK

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1745)

EXTERNAL TANK

ARC11-716 1A14 01+T12+S12N25

ALPHAT ( S ) = 0.240 BETAT ( S ) = 0.420

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8330 .9280

PHI

.000	-.0183	-.0028	-.1430
30.000	-.0318	-.0006	-.1497
60.000	.0146	.0360	-.0464
90.000	.0268	.0580	
120.000	.0362	.0340	-.1761
135.000	.0284	.0149	-.2736
150.000	-.0246	-.0976	-.2689
165.000	.0198	-.0206	-.3329
180.000	.0015	-.0492	-.5194

ARC11-716 1A14 OL+T12+S12N25

EXTERNAL TANK

(RB1746) ( 14 FEB 74 )

## REFERENCE DATA

SREF = 2.4210 36. FT. XMRP = 29.9800 INCHES  
 LREF = 36.7090 INCHES YMRP = .0000 INCHES  
 BREF = 36.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

MACH = .975 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

ALPHAT ( 1 ) = -8.670 BETAT ( 1 ) = -8.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PHI	.000	1.0240	.6058	.2139	-.2824	-.5796	-.4897	-.1612	-.1175	-.0283	-.1147	-.3330	-.3388	-.1480	-.0990	-.0182
30.000				.3903	-.1950	-.5196	-.5865	-.1998	-.0976	-.1301	-.3717	-.4764	-.2837	-.2057	-.1229	-.0292
60.000				.4537	-.0409	-.5971	-.4489	-.1834	-.0681	-.1333	-.5453	-.7462	-.4129	-.1862	-.0085	.0324
90.000		1.0100		.6293	.1323	-.2498	-.2963	.0899	.2735	.3471	-.6105	-.6364	-.2094	-.2094	-.1077	.0420
120.000				.7450	.2434	-.1319	-.1937	.1373	.2975	.4076	-.0524	.1469	.0874	-.0280	-.1424	-.0084
135.000									.2477		.2312	.0769			-.1678	
150.000				.7658	.2613	-.1329	-.1937	.0343	.2142	.3026	.4034	.2898	.0333	-.1683	-.3027	-.0765
165.000				.2145	-.1793	-.2450	-.0264	.1526	.2663	.4092	.2642	.0324	-.1750	-.3233	-.0755	
180.000		1.0240	1.0730	.6362	.1531	-.2317	-.2904	-.0597	.1124	.2517	.3847	.1943	-.0755	-.2166	-.3623	-.1382
270.000			.6172						.3592							

X/LT .7480 .8530 .9280

PHI

.000	.0045	-.0097	-1901
30.000	-.0203	-.0007	-.1450
60.000	.0169	.0039	-.0580
90.000	.0379	-.0467	
120.000	.1358	-.0054	.0980
135.000	.1399	-.0086	.0177
150.000	.0760	-.0426	.1057
165.000	.0708	-.0049	-.2320
180.000	.0317	-.0257	-.2459

ALPHAT ( 1 ) = -8.630 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PHI	.000	1.0760	.6481	.2414	-.2541	-.5591	-.5908	-.1544	-.1084	.0114	-.0675	-.3192	-.4806	-.1089	-.0411	.0143
30.000				.2883	-.2129	-.5253	-.5925	-.1658	-.0863	-.0360	-.2692	-.4580	-.2908	-.1980	-.1173	-.0100
60.000				.3894	-.1168	-.4560	-.5219	-.1641	-.0128	-.0789	-.5029	-.7587	-.4088	-.2666	-.0413	-.0445
90.000		.9241		.5252	.0226	-.3526	-.4214	.0635	.2803	.3472	-.6549	-.6627	-.2265	-.1396	-.0217	
120.000				.6457	.1463	-.2523	-.3262	.0817	.2870	.4162	.0923	.0911	.0132	-.1175	-.2044	-.1158
135.000									.2441		.2351	.0029		-.2418		
150.000				.7132	.1991	-.2048	-.2734	.0422	.2209	.3212	.3875	.0885	.0272	-.2815	-.3762	-.1858



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81746)

EXTERNAL TANK

ARC11-716 IA14 OR-T12-S12M25

ALPHAT ( 1 ) = -0.630 BETAT ( 2 ) = -4.110

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
165.000				.1995	-.2019	-.2778	.0162	.1049	.2995	.4199	.2021	-.0309	-.2820	-.3524	-.1491
180.000	1.0780	1.0930	.5883	.1705	-.2280	-.2958	-.0113	.1560	.2913	.4103	.2100	-.1076	-.2562	-.3816	-.1680
270.000		.7256							.3474						

X/LT .7460 .8530 .9280

PHI

.000	.0303	.0165	-.1933
30.000	.0281	.0226	-.1369
60.000	.0563	.0403	-.0057
90.000	.0872	.0338	
120.000	.1186	-.0355	-.0191
135.000	.1171	-.0498	-.0796
150.000	.0548	-.0936	-.0187
165.000	.0753	-.0421	-.2674
180.000	.0436	-.0507	-.2780

ALPHAT ( 1 ) = -0.530 BETAT ( 3 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.0930	.6755	.2488	-.2498	-.5541	-.5533	-.1528	-.0953	.0449	-.0444	-.3089	-.5177	-.0862	-.0811	.0303
30.000			.2628	-.2313	-.5466	-.6035	-.1681	-.0906	.0587	-.1943	-.4364	-.3389	-.1414	-.0930	-.0083
60.000			.3194	-.1877	-.5042	-.5660	-.1668	.0210	-.0049	-.4773	-.7333	-.3847	-.2923	-.1168	.0348
90.000		.8334	.4221	-.0821	-.4381	-.5082	-.0211	.2942	.3534		-.6236	-.6915	-.2408	-.1485	-.0398
120.000			.5417	.0392	-.3433	-.4172	-.0001	.2732	.4237	.0612	.0308	-.0749	-.1763	-.2808	-.1094
135.000								.2284		.2378		-.0732		-.3503	
150.000			.6392	.1255	-.2702	-.3409	-.0466	.2079	.3215	.3670	-.0259	-.1855	-.3515	-.4948	-.1699
165.000				.1687	-.2358	-.3054	-.0406	.1881	.3040	.4154	.1384	-.0788	-.1920	-.3740	-.1537
180.000	1.0930	1.0960	.6925	.1757	-.2270	-.2903	.0008	.1807	.2901	.4042	.2196	-.1435	-.2391	-.3947	-.1562
270.000		.8293							.3435						

X/LT .7460 .8530 .9280

PHI

.000	.0496	.0161	-.2106
30.000	.0369	.0280	-.1664
60.000	.0739	.0472	.0232
90.000	.0621	.0016	
120.000	.0844	-.0463	-.1526
135.000	.0724	-.0594	-.2200
150.000	.1375	-.1392	-.2009

DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4932

ARC11-716 1A14 CL+T12+S12+M5 (R81746)

ALPHAT ( 1 ) = -8.990 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI

165.000 .0667 -.0680 -.2837  
 180.000 .0821 -.0566 -.2920

ALPHAT ( 1 ) = -8.800 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6360

PHI

.000 1.0760 .6568 .2453 -.2464 -.5538 -.5968 -.1526 -.1083  
 30.000 .2306 -.2717 -.5826 -.6118 -.1548 -.1066  
 60.000 .2464 -.2436 -.5928 -.5936 -.1595 -.10892  
 90.000 .7259 .3099 -.1849 -.5085 -.5672 -.1079 .2236  
 120.000 .4265 -.0701 -.4277 -.4997 -.0627 .2269 .4327 .1295 -.0238 -.1277 .2205 -.3177 -.1489  
 135.000 .5480 .0426 -.3365 -.4047 -.1994 .1671 .3034 .3344 -.1642 -.3489 -.4596 -.5363 -.1870  
 165.000 .1261 -.2852 -.3343 -.1613 .1552 .2817 .3802 .1081 -.0985 -.2113 -.2920 -.1832  
 180.000 1.0760 1.0910 .9847 .1696 -.2255 -.2952 -.0375 .1675 .2791 .3840 .2222 -.1370 -.2405 -.3500 -.2020  
 270.000 .9308 .3414

X/LT .7480 .8530 .9280

PHI

.000 .0317 .0213 -.1485  
 30.000 .0224 .0176 -.1894  
 60.000 .0504 .0447 -.0194  
 90.000 -.0154 -.0851  
 120.000 .0258 -.0810 -.2379  
 135.000 .0098 -.0891 -.3139  
 165.000 -.0400 -.1864 -.3137  
 180.000 .0015 -.0865 -.3523  
 270.000 .0079 -.2851 -.4590

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 OF POOR QUALITY



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4933

(R81740)

EXTERNAL TANK

ARC11-716 1A14 01+712+512+25

ALPHAT (1) = -8.638 BETAT (3) = 8.270

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.0000	1.0150	.3962	.1998	-.2863	-.4044	-.3036	-.0529	-.1216	-.0351	-.1169	-.3278	-.3441	-.1432	-.0338	-.0193
30.0000			.1688	-.3086	-.4146	-.1466	-.0478	-.1244	-.0206	-.1330	-.3910	-.4389	-.1173	-.0441	-.0180
60.0000			.1696	-.3073	-.4137	-.0832	-.1588	-.1395	.1352	-.2950	-.6991	-.3695	-.1809	-.0870	-.0104
90.0000		.8091	.2022	-.2806	-.4027	-.1099	-.1603	.1412	.3727	-.6823	-.7026	-.2722	-.1198	-.0798	
120.0000			.3044	-.1798	-.3487	-.4032	-.1336	.1778	.4237	.1554	-.0557	-.1829	-.2773	-.3220	-.1926
135.0000								.1229		.2044	-.2379		-.3720		
150.0000			.4442	-.0537	-.2651	-.3158	-.2798	.0921	.2531	.2622	-.2506	-.4289	-.5697	-.4805	-.2475
165.0000				.1315	-.1782	-.2348	-.1996	.0702	.2199	.3035	.0372	-.1261	-.2367	-.3273	-.2380
180.0000	1.0150	.9989	.6546	.1975	-.1180	-.1749	-.0902	.0966	.2119	.3337	.2028	-.1123	-.2817	-.4143	-.2190
270.0000		1.0090							.3320						

X/LT .7460 .8530 .9280

PMI

.0000	.0040	-.0096	-.1911
30.0000	-.0026	-.0057	-.2086
60.0000	.0235	.0213	-.0519
90.0000	-.1294	-.2282	
120.0000	-.0535	-.1292	-.2718
135.0000	-.0592	-.1239	-.3434
150.0000	-.1102	-.2523	-.3532
165.0000	-.0908	-.1221	-.3959
180.0000	-.1064	-.1525	-.5340

ALPHAT (2) = -4.390 BETAT (1) = -8.230

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PMI															
.0000	1.0810	.7134	.3156	-.1940	-.5162	-.5784	-.1309	-.0893	.0179	-.1067	-.3149	-.2900	-.0928	-.0494	-.0458
30.0000			.4216	-.0876	-.4421	-.5160	-.3293	-.0150	-.0444	-.3164	-.4075	-.2103	-.1728	-.1060	-.0335
60.0000			.9496	.0385	-.3388	-.4069	-.0745	.0712	.0407	-.6036	-.6420	-.3207	-.1346	.0219	.0323
90.0000		1.0630	.6634	.1456	-.2500	-.3170	.1152	.3154	.4429	-.6529	-.6347	-.1592	-.0336	.0246	
120.0000			.6991	.1907	-.2154	-.2892	.0723	.2509	.3251	-.2161	.0506	.0890	-.0187	-.1249	-.0150
135.0000								.1874		.0885	.0616		-.1518		
150.0000			.6715	.1554	-.2450	-.3144	-.0401	.1531	.2137	.3052	.2288	.0194	-.1783	-.2915	-.0673
165.0000				.0959	-.2968	-.3668	-.1862	.1047	.1959	.3455	.2203	.0118	-.1674	-.3184	-.0685
180.0000	1.0810	.9887	.5512	.0343	-.3412	-.4129	-.2269	.0744	.2058	.3425	.1542	-.0991	-.2363	-.3506	-.1201
270.0000		.6653							.5127						

X/LT .7460 .8530 .9280

PMI

ORIGINAL FACILES  
OF POOR QUALITY

(RB1746)

EXTERNAL TANK

ARC11-716 1A14 OA-T12-S12N25

ALPHAT ( 2 ) = -4.390 BETAT ( 1 ) = -8.230

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .0530 .9260

PHI  
 .0000 -.0110 -.0124 -.1925  
 30.0000 -.0078 .0091 -.1565  
 60.0000 .0533 .0687 -.0273  
 90.0000 .0933 .0863  
 120.0000 .1410 .1147 .1000  
 135.0000 .1466 .1026 .0308  
 150.0000 .0955 .0513 .1268  
 165.0000 .0942 .0675 -.2226  
 180.0000 .0566 .0291 -.2464

ALPHAT ( 2 ) = -4.360 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
 PHI  
 .0000 1.1360 .7710 .3484 -.1787 -.5033 -.5746 -.1371 -.0785 .0559 -.0597 -.3084 -.4394 -.0399 -.0178 .0016  
 30.0000 .3997 -.1229 -.4724 -.5428 -.2465 -.0082 .0380 -.2223 -.3822 -.2666 -.1339 -.0794 -.0206  
 60.0000 .4786 -.0438 -.4032 -.4792 -.1252 .1204 .0832 -.5392 -.6506 -.3246 -.2264 -.0279 .0392  
 90.0000 .5537 .0356 -.3416 -.4230 .0550 .3301 .4494 -.6611 -.6652 -.1937 -.0872 -.0084  
 120.0000 .6084 .0899 -.3034 -.3858 .0131 .2624 .3429 -.1548 -.0069 .0110 .1038 .1954 .0853  
 135.0000 .6207 .0969 -.2928 -.3719 -.1684 .1064 .2551 .3062 .0244 .0142 .2483 .3590 .1388  
 150.0000 .0800 -.3045 -.3935 -.2366 .1436 .2387 .3501 .1905 .0496 .2539 .3528 .1077  
 165.0000 1.1360 1.0090 .5710 .0480 -.3311 -.4135 -.1275 .1087 .2438 .3459 .1604 .2409 .3677 .1347  
 180.0000 .7800 .4980

X/LT .7400 .0530 .9260

PHI  
 .0000 .0127 .0177 -.1932  
 30.0000 .0252 .0406 -.1425  
 60.0000 .0605 .0677 -.0147  
 90.0000 .0644 .1065  
 120.0000 .1163 .0712 .0118  
 135.0000 .1187 .0521 -.0431  
 150.0000 .0704 -.0909 .0492  
 165.0000 .0877 .0287 -.2699  
 180.0000 .0646 .0063 -.2763



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4933

(R81146)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+S12N25

ALPHAT ( 2 ) = -4.270 BETAT ( 3 ) = -.010

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1330	.7878	.3315	-.1642	-.5035	-.5571	-.1415	-.0702	.0719	-.0437	-.2945	-.4632	-.0384	-.0085	.0128
30.000			.3684	-.1593	-.4920	-.5595	-.1755	-.0579	.1176	-.1489	-.3625	-.4004	-.0683	-.0443	-.0206
60.000			.4006	-.1291	-.4694	-.5303	-.1238	-.1052	.1484	-.5084	-.6486	-.3077	-.1708	-.1099	.0103
90.000		.8858	.4542	-.0640	-.4336	-.4987	-.0101	.3113	.4729	-.6927	-.7067	-.2195	-.1048	-.0306	
120.000			.5117	-.0048	-.3903	-.4565	-.0150	.2353	.3733	-.1001	-.0782	-.0898	-.1575	-.2554	-.0878
135.000								.1905		.1425		-.1071		-.3106	
150.000			.5625	.0363	-.3502	-.4243	-.1147	.1729	.2738	.2941	-.0999	-.2201	-.3280	-.4421	-.1371
165.000				.0504	-.3390	-.4110	-.1453	.1466	.2513	.3496	.0764	-.1172	-.1987	-.3643	-.1440
180.000	1.1330	1.0080	.5823	.0498	-.3370	-.4065	-.0612	.1120	.2400	.3441	.1669	-.1856	-.2398	-.3372	-.1391
270.000		.8848							.4805						

X/LT .7460 .8530 .9280

PMI															
.000	.0405	.0328	-.1818												
30.000	.0279	.0347	-.1631												
60.000	.0640	.0718	-.0090												
90.000	.0655	.0639													
120.000	.0903	.0229	-.1067												
135.000	.0830	.0078	-.1770												
150.000	.0494	-.0633	-.1480												
165.000	.0789	-.0329	-.2749												
180.000	.0836	.0001	-.2910												

ALPHAT ( 2 ) = -4.400 BETAT ( 4 ) = 4.120

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1310	.7658	.3442	-.1750	-.5071	-.5689	-.1462	-.0818	.0806	-.0672	-.3025	-.4456	-.0450	-.0154	-.0004
30.000			.3142	-.1874	-.5258	-.5877	-.1365	-.0738	.0856	-.1022	-.3637	-.4300	-.0420	-.0209	-.0035
60.000			.3101	-.1878	-.5222	-.5762	-.1218	-.0122	.1780	-.4327	-.6530	-.2647	-.0955	-.0650	-.0165
90.000		.7783	.3412	-.1781	-.5060	-.4150	-.0565	.0950	.5095	-.7014	-.6399	-.2083	-.1082	-.0396	
120.000			.4011	-.1112	-.4658	-.5304	-.0423	.1230	.3643	-.0370	-.1248	-.1543	-.1588	-.2749	-.1024
135.000								.1320		.1562		-.1915		-.3226	
150.000			.4813	-.0398	-.4102	-.4811	-.1074	.1324	.2765	.2806	-.2360	-.3873	-.4336	-.4814	-.1491
165.000				.0129	-.3581	-.4397	-.2401	.1295	.2407	.3269	.0480	-.1498	-.2193	-.2802	-.1446
180.000	1.1310	1.0090	.5721	.0447	-.3374	-.4127	-.1633	.1120	.2219	.3294	.1737	-.1839	-.2454	-.3370	-.1589
270.000		.9780													

X/LT .7460 .8530 .9280



(R81748)

EXTERNAL TANK

ARC11-716 IA14 CR+T12+S12R25

ALPMAT ( 2 ) = -4.400 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0330 .9200

PMI

.000 .0190 .0103 -.1055  
 30.000 .0253 .0245 -.1055  
 60.000 .0343 .0402 -.0446  
 90.000 .0174 -.0021  
 120.000 .0375 -.0324 -.2108  
 150.000 .0296 -.0429 -.2080  
 180.000 -.0103 -.1598 -.2709  
 165.000 .0219 -.0403 -.3591  
 100.000 .0275 -.0354 -.4503

ALPMAT ( 2 ) = -4.410 BETAT ( 5 ) = 8.240

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0000 .0490 .1130 .1700 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6300

PMI

.000 1.0780 .7134 .3002 -.1952 -.5133 -.5798 -.1451 -.0963 .0114 -.1203 -.3195 -.2908 -.0956 -.0498 -.0405  
 30.000 .2436 -.2465 -.5803 -.5088 -.1207 -.0916 .0076 -.1304 -.3909 -.2694 -.0703 -.0369 -.0168  
 60.000 .2261 -.2753 -.5549 -.1892 -.1175 -.0630 .0027 -.4084 -.6514 -.1981 -.0603 -.0378 -.0328  
 90.000 .6706 .2403 -.2494 -.5444 -.0989 -.0848 -.0788 .5580 -.6944 -.4428 -.1677 -.1006 -.0827  
 120.000 .2804 -.1997 -.5198 -.3728 -.0925 .0153 .3920 .0159 -.1314 -.2074 -.2542 -.2774 -.1632  
 150.000 .3002 -.1207 -.4573 -.5338 -.1433 .0547 .2492 .2479 -.2733 -.4358 -.5404 -.4173 -.2103  
 165.000 .0337 -.4015 -.4718 -.3426 .0767 .1923 .2792 .0196 -.1746 -.2485 -.3345 -.2136  
 180.000 1.0780 .9196 .5461 .0294 -.3493 -.4217 -.2426 .0806 .1610 .2081 .1724 -.1308 -.2976 -.4051 -.2103  
 270.000 1.0690 .4361

W/LT .7400 .0330 .9200

PMI

.000 -.0004 -.0072 -.1076  
 30.000 .0149 .0175 -.1052  
 60.000 .0114 .0303 -.0415  
 90.000 -.0679 -.0951  
 120.000 -.0293 -.0666 -.2404  
 150.000 -.0350 -.0703 -.3136  
 165.000 -.0608 -.1935 -.3211  
 180.000 -.0313 -.0755 -.3657  
 170.000 -.0604 -.1028 -.517\*



ALPHAY ( 3 ) 2 - .610 BETAY ( 1 ) 2 -0.283

SECTION ( INTERNAL TANK

DEPENDENT VARIABLE C/P

(R01Y46)

**EXTERNAL TANK**

[illegible][illegible]

ALPHAT( 3) = -.590 BETAY ( 2) = -4.130

SECTION (1) FRYERMA: T.A.K

37616VA INCG13000

[illegible]

(R01740)

EXTERNAL TANK

ARC11-P16 1A14 OR-T12-S12M25

ALPHA ( 3 ) = -.990 BETAY ( 2 ) = -.4130

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C0

K/L T 7400 .0530 .9200

T01  
 .0000 .0193 .0265 -.1037  
 30.0000 .0276 .0375 -.1396  
 60.0000 .0706 .1110 -.2351  
 90.0000 .1020 .1326 -.3261  
 120.0000 .1377 .1593 .0648  
 150.0000 .1390 .1234 -.0342  
 180.0000 .1013 .0646 .0999  
 165.0000 .1197 .0910 -.2495  
 180.0000 .0936 .1625 -.2567

ALPHA ( 3 ) = -.990 BETAY ( 3 ) = .010

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C0

K/L T 0000 .0000 .0000 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

T01  
 .0000 1.1720 .0049 .4541 -.0745 -.4254 -.4978 -.5036 -.0205 -.0237 -.2781 -.3893 -.0038 .0093 .0044  
 30.0000 .4593 -.0713 -.4287 -.5025 -.3051 -.0038 .1458 -.0873 -.3180 -.3679 -.0234 -.0202 -.0079  
 60.0000 .4560 .0094 .4235 -.4919 .1123 .1006 .2492 -.3822 -.5139 -.2563 -.0466 -.0193 .0011  
 90.0000 .9033 .4638 .0585 -.4187 .4906 .0369 .2860 .5147 .7295 .3359 .1268 .0833 .0361  
 120.0000 .4716 .0496 -.4145 .4878 .0503 .1435 .3115 .2195 .2365 .0804 .1069 .1904 .0684  
 150.0000 .4627 .0453 .4100 .4756 .1010 .0911 .2284 .2277 .1611 .1905 .2502 .3603 .1410  
 165.0000 .0391 .4032 .4821 .1108 .0725 .2045 .2786 .0271 .1343 .1908 .2630 .1037  
 180.0000 1.1720 .9192 .4825 .4087 .4795 .0820 .0394 .1967 .2732 .1203 .1873 .1852 .2789 .0914  
 270.0000 .9038

K/L T 7400 .0530 .9200

T01  
 .0000 .0401 .0484 .11502  
 30.0000 .0392 .0375 .1343  
 60.0000 .0316 .0685 .0429  
 90.0000 .0016 .1038  
 120.0000 .1048 .0814 .0554  
 150.0000 .1036 .0674 .1397  
 180.0000 .0707 .0026 .1031  
 165.0000 .0968 .0413 .2719  
 180.0000 .0974 .0477 .2472



ARC11-716 IAI14 CR+112+512+25

(R01740)

EXTERNAL TANK

ALPHA(1,3) = -.990 BETA(1,4) = 7.110

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1310	.6623	.4710	-.0844	-.4373	-.5040	-.4856	-.0293	.0923	-.0490	-.2869	-.3741	-.0186	-.0103	-.0111
30.000			.5898	-.1380	-.4704	-.5375	-.1239	-.0417	.0916	-.0804	-.3449	-.3650	-.0096	-.0179	-.0149
60.000			.3615	-.1640	-.4868	-.5492	-.1112	-.0106	.2976	-.3270	-.4933	-.2407	-.0481	-.0202	-.0149
90.000		.7959	.3553	-.1633	-.4974	-.5519	-.0702	.1134	.5547		-.7081	-.1034	-.0238	-.0841	-.0933
120.000			.3748	-.1461	-.4767	-.5432	-.0485	.0283	.3016	-.1374	-.2469	-.0940	-.1324	-.2179	-.0694
150.000								.0268	.0942			-.1563	-.2648		
180.000			.4129	-.1134	-.4534	-.5223	-.0367	.0178	.2109	-.2038	-.2579	-.3433	-.3553	-.4223	-.1174
210.000				-.0741	-.4341	-.5037	-.1031	.0411	.2012	.2695	.0103	-.1679	-.1636	-.2639	-.1181
240.000		.4218	.4748	-.0525	-.4140	-.4848	-.1598	.0557	.1632	.2804	.1413	-.2145	-.1845	-.2909	-.1281
270.000		1.0000							.4873						

K/LT .740 .8330 9280

PHI															
.000	.0124	.0265	-.1565												
30.000	.0276	.0459	-.1497												
60.000	.0357	.0623	-.0191												
90.000	.0126	.0363													
120.000	.0352	.0215	-.1696												
150.000	.0320	.0093	-.2503												
180.000	.0243	-.0374	-.2369												
210.000	.0485	.0173	-.3125												
240.000	.0496	.0107	-.4201												

ALPHA(1,3) = -.990 BETA(1,5) = 9.280

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.0690	.6077	.4026	-.1030	-.4527	-.5314	-.4366	-.0725	.0126	-.1179	-.3038	-.2849	-.0687	-.0589	-.0674
30.000			.3101	-.1983	-.5248	-.5927	-.1361	-.0847	.0507	-.0892	-.3621	-.2693	-.0354	-.0703	-.0328
60.000			.2645	-.2359	-.5557	-.5954	-.1393	-.0702	.2855	-.2696	-.4552	-.1725	-.0620	-.0380	-.0343
90.000		.6821	.2674	-.2455	-.5603	-.5844	-.1150	-.0101	.5952		-.0235	-.1216	-.0373	-.1239	-.1443
120.000			.2687	-.2248	-.5488	-.5813	-.0704	.1436	.1456	-.0771	-.2855	-.1493	-.1861	-.2501	-.1272
150.000								.0336	.1985			-.1232	-.2803		
180.000			.3248	-.1179	-.5113	-.5273	-.0743	.0334	.1687	.1937	-.2970	-.4240	-.4354	-.3912	-.1728
210.000				-.1275	-.4827	-.5412	-.0998	.0041	.1371	.2220	-.0153	-.2046	-.2262	-.3019	-.1720
240.000	1.0990	.0176	.4480	-.0740	-.4839	-.5540	-.1337	.0455	.0375	.2304	.1323	-.1693	-.2633	-.3610	-.1794
270.000		1.0800							.4712						

K/LT .740 .8330 9280

ARC11-716 .A14 OR+T12+S12N25 (RB1746)

EXTERNAL TANK

ALFAT ( 3 ) = -.560 BETAT ( 5 ) = 6.200

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

.000 -.0265 -.0101 -.1924  
 30.000 .0056 .0149 -.1701  
 60.000 .0096 .0290 -.0344  
 90.000 -.0751 -.0406  
 120.000 .0069 -.0137 -.1997  
 135.000 .0852 -.0188 -.2776  
 150.000 -.0312 -.1415 -.2933  
 165.000 -.0148 -.0353 -.3370  
 180.000 -.0271 -.0596 -.4964

ALPHAT ( 4 ) = 4.020 BETAT ( 1 ) = -8.290

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .80 .1941 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5560 .6380

PHI

.000 1.0870 .9129 .5286 .0130 -.3718 -.4460 -.5361 .0129 .0302 -.0775 -.1759 -.2215 -.0425 -.0498 -.0591  
 30.000 .6468 .1259 -.2778 -.3582 -.4325 .0561 .0871 -.1639 -.1481 -.1289 -.0295 -.0308 -.0220  
 60.000 .7033 .1823 -.2264 -.2991 -.0095 .2143 .2995 -.2857 -.1302 .0425 .0287 .0281  
 90.000 1.0680 .6708 .1572 -.2520 -.3278 .1004 .3095 .4414 .4432 .2660 -.1775 -.1147 -.0393  
 120.000 .5617 .0541 -.3354 -.4123 -.0976 .0850 .0801 -.4355 -.5179 -.1428 .1679 .0320 .0136  
 135.000 .4599 -.0566 -.4187 -.4913 -.4245 .0215 .0131 .2050 .0245 -.1348 -.0142 -.1362 -.0423  
 150.000 -.1311 -.4804 -.5536 -.2053 -.0243 .0531 .2395 .0993 -.0657 .0420 .1812 -.0232  
 165.000 1.0870 .7878 .3283 -.1826 -.5069 -.5739 -.1340 -.0366 .1086 .2421 .0727 -.1473 -.1085 -.1531 -.0594  
 180.000 .6651

X/LT .7460 .8530 .9280

PHI

.000 -.0251 -.0148 -.1763  
 30.000 .0234 .0532 -.1428  
 60.000 .0749 .1287 -.0311  
 90.000 .0653 .0517  
 120.000 .1945 .2434 .1404  
 135.000 .2030 .2320 .0712  
 150.000 .1527 .1504 .1661  
 165.000 .1596 .1528 .1864  
 180.000 .1232 .1046 -.2306

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 OL+T12+S12N25 (R01746)

ALPHAT ( 4 ) = 4.030 BETAT ( 2 ) = -4.150

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.1420	.9777	.5679	.0397	-.3472	-.4248	-.5171	.0327	.1204	-.0073	-.2036	-.2815	.0169	.0074	-.0082
30.000			.6145	.0850	-.3104	-.3936	-.4824	.0963	.1535	-.0774	-.1846	-.2327	.0024	.0024	.0015
60.000			.6115	.0850	-.3082	-.3840	-.4824	.2151	.2946	-.3069	-.2993	-.2183	.0028	.0326	.0180
90.000			.9815	.5604	-.3425	-.3451	-.4243	.0147	.4591	-.5257	-.5257	-.2990	-.0291	-.0352	-.0369
120.000			.4822	-.0339	-.4027	-.4781	-.1560	.1335	.1377	-.3384	-.5067	-.2329	.0564	-.0299	-.0351
135.000								.0666		-.0041		-.2327		-.0611	
150.000			.4212	-.0983	-.4581	-.5208	-.1894	.0181	.1030	.2081	.0156	-.2069	-.0793	-.1657	-.0704
165.000					-.1438	-.4925	-.5534	-.1256	.1278	.2440	.0807	-.1130	-.0861	-.1380	-.0476
180.000	1.1420	.8024	.3520	-.1733	-.5010	-.5593	-.1104	-.0418	.1246	.2214	.0940	-.1599	-.1226	-.1431	-.0650
270.000		.7812							.5292						

X/LT .7460 .8530 .9280

PHI

.000	.0314	.0495	-.1047
30.000	.0460	.0779	-.0940
60.000	.0689	.1216	.0117
90.000	.0825	.1334	
120.000	.1557	.1878	.0417
135.000	.1602	.1735	-.0215
150.000	.1279	.1019	.0651
165.000	.1441	.1223	-.2425
180.000	.1188	.0933	-.2589

ALPHAT ( 4 ) = 4.020 BETAT ( 3 ) = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.1610	.9950	.5727	.0431	-.3439	-.4219	-.5139	.0492	.1487	.0105	-.2150	-.2709	.0242	.0223	.0103
30.000			.5579	.0262	-.3615	-.4398	-.5240	.0352	.1859	-.0301	-.2382	-.2682	.0138	.0078	-.0039
60.000			.5102	-.0156	-.3939	-.4634	-.1282	.1017	.3282	-.2569	-.3238	-.2115	-.0247	.0022	-.0094
90.000			.9863	.4517	-.0718	-.4327	-.5044	.0543	.4857	-.6446	-.6446	-.2917	-.0234	-.0366	-.0744
120.000			.4010	-.1215	-.4669	-.5396	-.1180	.0564	.0080	-.3236	-.4317	-.1896	-.0177	-.0867	-.0462
135.000								-.0162		.0182		-.2433		-.1169	
150.000			.3771	-.1531	-.4948	-.5545	-.1358	.0348	.1846	.2231	.1347	-.2404	-.1573	-.2069	-.0902
165.000				-.1572	-.4967	-.5571	-.1186	-.0405	.1588	.2570	.0487	-.2191	-.1171	-.1567	-.0530
180.000	1.1610	.8024	.3636	-.1633	-.5032	-.5514	-.1094	-.0568	.1650	.2509	.1142	-.2576	-.1312	-.1523	-.0348
270.000		.8906							.4853						

X/LT .7460 .8530 .9280

PHI

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(RB1746)

EXTERNAL TANK

ARC11-716 1A14 ON-T12+312M25

ALPHAT ( 4 ) = 4.020 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI

.000 .0468 .0692 -.0998  
 30.000 .0478 .0801 -.1000  
 60.000 .0430 .0999 .0025  
 90.000 .0666 .1331  
 120.000 .1262 .1344 -.0481  
 135.000 .1258 .1199 -.1226  
 150.000 .0933 .0569 -.0731  
 165.000 .1263 .0946 -.2660  
 180.000 .1252 .0931 -.2735

ALPHAT ( 4 ) = 4.010 BETAT ( 4 ) = 4.160

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.1420 .9691 .5575 .0319 -.3470 -.4292 -.5228 .0350 .1128 -.0168 -.2060 -.2897 .0183 .0034 -.0089  
 30.000 .4779 -.0462 -.4101 -.4891 -.3101 -.0020 .1685 -.0118 .2902 -.2327 .0116 -.0052 -.0123  
 60.000 .4033 -.1239 -.4693 -.5341 -.0845 .0046 .2834 -.1957 .3599 -.1430 -.0224 -.0370 -.0344  
 90.000 .3409 -.1596 -.5012 -.5627 -.0911 .0425 .5350 .7430 .1932 .0635 .0738 .0389  
 120.000 .3152 -.1877 -.5221 -.5847 -.1006 -.0235 .2535 .2832 .4179 .1000 .1026 .1539 .0490  
 135.000 .3227 -.1896 -.5205 -.5659 -.1032 .0461 .1128 .1685 .2391 .2838 .2510 .3068 .0926  
 165.000 .1650 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000  
 180.000 1.1420 .8379 .3544 -.1721 -.5006 -.5689 -.0938 .1216 .2024 .0199 .2095 .1197 .1428 .0657  
 270.000 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903 .9903

X/LT .7460 .6530 .9280

PHI

.000 .0269 .0499 -.1055  
 30.000 .0286 .0595 -.1171  
 60.000 .0245 .0692 -.0460  
 90.000 .0384 .0936  
 120.000 .0778 .0631 -.1337  
 135.000 .0672 .0492 -.2292  
 150.000 .0424 -.0394 -.2190  
 165.000 .0657 .0343 -.2933  
 180.000 .0724 .0313 -.4071

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R91748)

EXTERNAL TANK

ARC11-716 1A14 C1+T12+312N25

ALPHAT( 4) = 4.030 BETAT( 5) = 9.320

DEPENDENT VARIABLE C<sup>2</sup>

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0030	.9134	.5214	.0111	-.3714	-.4470	-.5411	-.0099	.0292	-.0935	-.1862	-.2689	-.0371	-.0414
30.000				.3869	-.1241	-.4733	-.5511	-.2074	-.0601	.1196	-.0169	-.2731	-.1887	-.0097	-.0288
60.000				.2877	-.2197	-.5382	-.2810	-.1009	-.0703	.1394	-.1722	-.4004	-.0926	-.0361	-.0565
90.000				.2342	-.2368	-.5697	-.1815	-.1119	-.0609	.0850	-.0310	-.1067	-.0894	-.0986	-.0823
120.000				.2254	-.2753	-.5777	-.1821	-.1078	-.0644	.1765	-.1977	-.3735	-.1258	-.1741	-.1989
135.000								-.0816		.0284		-.2188		-.2097	
150.000				.2460	-.2519	-.5688	-.1577	-.1072	-.0765	.0899	.1369	-.3123	-.3803	-.3175	-.1330
165.000					-.2205	-.5438	-.3633	-.1240	-.0759	.1000	.1729	-.0526	-.2474	-.1737	-.2328
180.000				.3258	-.1862	-.5181	-.5826	-.1139	-.0213	.0349	.1761	.0749	-.2344	-.1834	-.1596
270.000				1.0730						.4466					

X/LT .7460 .8530 .9280

PHI

.0000	-.0271	-.0118	-.1677
30.000	-.0038	.0125	-.1495
60.000	.0062	.0414	-.0726
90.000	.0275	.0551	
120.000	.0354	.0198	-.1630
135.000	.0245	.0121	-.2628
150.000	-.0203	-.1088	-.2722
165.000	.0102	-.0170	-.3259
180.000	-.0084	-.0471	-.5021

ALPHAT( 5) = 8.080 BETAT( 1) = -8.290

DEPENDENT VARIABLE C<sup>2</sup>

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.0390	.9983	.6370	.1168	-.2804	-.3517	-.4484	-.0470	.0587	-.0319	-.0917	-.1739	-.0278	-.0146
30.000				.7446	.2283	-.1846	-.2640	-.3211	.0940	.1448	-.0811	-.0491	-.1095	.0272	.0359
60.000				.7506	.2388	-.1752	-.2491	.0289	.2489	.3322	-.2562	-.1523	-.1131	.0868	.0711
90.000				.6401	.1353	-.2644	-.3387	.0652	.2611	.3558	-.3859	-.2576	-.2576	.0242	.0800
120.000				.4696	-.0259	-.5055	-.4754	-.1864	-.0287	-.0741	-.1507	-.3396	-.2194	.0736	.0592
135.000								-.0321		-.0058		-.2223		.0801	
150.000				.3433	-.1514	-.5023	-.5657	-.2753	-.0576	.1830	.1830	-.1031	-.2134	-.0045	-.0022
165.000					-.2298	-.5555	-.6259	-.1743	.0221	.1970	.0581	-.0922	-.0292	-.0685	.0185
180.000				.2275	-.2714	-.5752	-.2380	-.1529	.0596	.1830	.0515	-.1768	-.0887	-.0926	-.0191
270.000				.6165					.4978						

X/LT .7460 .8530 .9280

PHI

.0000	.7460	.8530	.9280
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ARC11-716 :A14 01+712+512N25 (R81746)

EXTERNAL TANK

ALPHAT ( 5 ) = 0.080 BETAT ( 1 ) = -0.290

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .8530 .9280

PHI

.0000 -.0067 .0121 -.1155  
 30.0000 .0609 .0945 -.0639  
 60.0000 .1071 .1618 .0394  
 90.0000 .1225 .1930  
 120.0000 .1743 .2906 .0556  
 150.0000 .1929 .2366 .0214  
 180.0000 .1439 .1381 .1317  
 165.0000 .1610 .1430 -.2273  
 180.0000 .1253 .1033 -.2567

ALPHAT ( 5 ) = 0.030 BETAT ( 2 ) = -4.140

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.0000 1.0000 1.0000 .6716 .1433 -.2619 -.3454 -.4399 .0733 .1391 .0317 -.1255 -.1392 .0222 .0252 .0161  
 30.0000 .7047 .1792 -.2374 -.3221 -.4102 .1386 .1933 -.0133 -.1045 -.1207 .0358 .0353 .0318  
 60.0000 .6466 .1287 -.2789 -.3508 -.2271 .2499 .3493 -.2078 -.1880 -.1234 .0446 .0533 .0329  
 90.0000 .9246 .5259 .0194 .3585 -.4463 .0272 .2797 .3640 .4096 -.3297 -.0455 .0093 -.0079  
 120.0000 .3932 -.1103 .4683 -.5441 .1723 .0363 .0101 .1564 .4269 .3402 .0059 .0376 .0112  
 150.0000 .3118 .1203 .5264 .5903 .1479 .0584 .0154 .0044 .0044 .0018  
 165.0000 .2364 .5642 .3906 .1371 .0949 .0706 .1973 .0498 .1398 .0740 .0586 .0130  
 180.0000 .10920 .6674 .2424 .2588 .5692 .2153 .1210 .0885 .0630 .1688 .1057 .0796 .0337  
 270.0000 .7306 .4171

X/LT .7480 .8530 .9280

PHI

.0000 .0446 .0711 -.0650  
 30.0000 .0695 .1125 -.0463  
 60.0000 .0817 .1429 .0627  
 90.0000 .1076 .1665  
 120.0000 .1502 .1976 .0050  
 150.0000 .1617 .1859 -.0327  
 180.0000 .1286 .1008 .0363  
 165.0000 .1468 .1209 -.2664  
 180.0000 .1226 .0944 -.2749



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ARC11-716 IA14 DL+T12+S12N25

EXTERNAL TANK

(RB1746)

ALPHAT ( 5 ) = 0.073 BETAT ( 3 ) = .080

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PHI	.0000	1.1110	1.0790	.6803	.1572	-.2527	-.3351	-.4330	.0821	.1700	.0532	-.1454	-.0616	.0377	.0289	.0202
30.000				.6369	.1171	-.2880	-.3703	-.4610	.1109	.2115	.0245	-.1743	-.0310	.0317	.0169	.0121
60.000				.5370	.0207	-.3635	-.4380	-.4568	.1655	.3686	-.1495	-.2227	-.0089	.0174	-.0011	-.0115
90.000			.8307	.4191	-.0890	-.4511	-.5224	-.1065	.1937	.3829	-.4893	-.1644	-.0820	-.0747	-.0263	
120.000				.3216	-.1849	-.5197	-.5810	-.1766	-.0432	.0698	-.2042	-.5333	-.2565	-.0186	-.0350	-.0177
135.000								-.0782		.0055		-.3080		-.0673		
150.000				.2762	-.2264	-.5490	-.6064	-.1657	-.0910	.0940	.1972	-.1152	-.2521	-.1342	-.1448	-.0748
165.000					-.2349	-.5535	-.3078	-.1534	-.1010	.0901	.2216	.0516	-.1741	-.0985	-.0943	-.0207
180.000		1.1110	.6873	.2576	-.2537	-.5592	-.2902	-.1297	-.1000	.0882	.2098	.1085	-.1811	-.1149	-.0858	-.0065
270.000			.8404						.3812							

X/LT .7480 .8530 9280

PHI

.000	.0598	.0872	-.0553
30.000	.0591	.0957	-.0791
60.000	.0497	.1095	-.0376
90.000	.0850	.1050	
120.000	.1344	.1581	-.0186
135.000	.1261	.1397	-.1130
150.000	.1018	.0795	-.0591
165.000	.1330	.1174	-.2591
180.000	.1288	.1133	-.2778

ALPHAT ( 5 ) = 0.160 BETAT ( 4 ) = 4.210

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PHI	.0000	1.0930	1.0580	.5615	.1494	-.2626	-.3395	-.4380	.0175	.1427	.0247	-.1254	-.1886	.0206	.0224	.0078
30.000				.5528	.0435	-.3499	-.4260	-.5133	.0226	.1898	.0262	-.2060	-.1342	.0181	.0047	-.0174
60.000				.4186	-.0887	-.4525	-.5175	-.1908	.0012	.3796	-.1041	-.2601	-.0640	.0393	.0095	-.0189
90.000		.7249	.3106	-.1929	-.5285	-.5355	-.1366	-.0555	.4271	-.4559	-.0337	-.0201	-.0487	-.0258		
120.000			.2471	-.2433	-.5663	-.5957	-.1499	-.1117	.1324	-.2093	-.5021	-.1827	-.0670	-.0871	-.0393	
135.000								-.1021		.0213		-.2223		-.1256		
150.000			.2374	-.2721	-.5795	-.5966	-.1480	-.1085	.0721	.1715	-.1668	-.2474	-.1905	-.1989	-.0993	
165.000				-.2647	-.5718	-.2216	-.1393	-.0980	.0661	.1893	.0025	-.2061	-.1038	-.1076	-.0366	
180.000		1.0930	.6901	.2473	-.2592	-.5715	-.3876	-.1297	.0838	.1820	.0964	-.2381	-.1000	-.0835	-.0348	
270.000			.9430						.3702							

X/LT .7480 .8530 9280

(RB1746)

EXTERNAL TANK

ARC11-716 IA14 CR+T12+S12M25

ALPHAT ( 5 ) = 8.180 TAT ( 4 ) = 4.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI

.000 .0444 .0737 -.0627  
 30.000 .0380 .0690 -.0802  
 60.000 .0367 .0799 -.0821  
 90.000 .0620 .0800  
 120.000 .0894 .0746 -.1185  
 135.000 .0768 .0803 -.2146  
 150.000 .0902 -.0206 -.1987  
 165.000 .0707 .0512 -.2892  
 180.000 .0774 .0405 -.4030

ALPHAT ( 5 ) = 8.110 BETAT ( 5 ) = 8.380

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PMI

.000 1.0380 1.0030 .6390 .1268 -.2752 -.3491 -.4477 -.0794 .0628 -.0423 -.0981 -.1899 -.0469 -.0136 -.0296  
 30.000 .334 -.0490 -.4172 -.4903 -.5715 -.0682 .1306 .0091 -.1869 -.2543 -.0363 -.0369 -.0398  
 60.000 .2957 -.1973 -.5293 -.5944 -.2394 -.0482 .3765 -.0585 -.2527 -.2106 .0297 .0175 -.0171  
 90.000 .6132 .2031 -.2796 -.5919 -.1980 .1516 -.1541 .4685 -.4937 -.2220 -.0071 -.0746 -.0986  
 120.000 .1672 -.3040 -.5981 -.1643 -.1314 -.0931 .0596 -.1177 -.4789 -.1897 -.0764 -.1247 -.0595  
 135.000 .1741 -.3374 -.5990 -.1619 -.1335 -.1096 .0029 .0806 -.1967 -.3304 -.2320 -.2220 -.0851  
 150.000 .2967 -.5962 -.1697 -.1233 -.0959 .0565 .1464 -.0435 -.2368 -.1361 -.1524 -.0961  
 165.000 1.0390 .6192 .2283 -.2797 -.5840 -.2474 -.1220 -.0820 .0373 .1381 .0394 -.2319 -.1418 -.2061 -.0995  
 180.000 1.0320 .3663

X/LT .7460 .8530 .9280

PMI

.000 -.0080 .0468 -.1043  
 30.000 -.0198 .0165 -.1081  
 60.000 .0353 .0807 -.0040  
 90.000 .0248 .0771  
 120.000 .0804 .0626 -.1460  
 135.000 .0548 .0529 -.2337  
 150.000 .0005 -.0519 -.2354  
 165.000 .0463 .0216 -.3046  
 180.000 .0212 -.0083 -.4726



ARC11-716 IA14 01+T12+S12N25

EXTERNAL TANK

(RB1747) (14 FEB 74)

## REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 29.5000 INCHES  
 LREF = 38.7090 INCHES YMRP = .0000 INCHES  
 SREF = 38.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT (1) = -0.750 BETAT (1) = -0.250

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6370
PM1															
.000	1.0740	.6787	.2962	-.1679	-.3384	-.3825	-.0705	-.1194	.0126	-.0175	-.2163	-.3053	-.1224	-.0770	-.0835
30.000			.3809	-.0943	-.2899	-.3468	-.4003	-.0711	-.0991	-.2814	-.4028	-.2185	-.1722	-.1514	-.1100
60.000			.5279	.0489	-.1912	-.2478	-.1621	-.0166	-.0732	-.5733	-.6720	-.3806	-.1414	.0132	-.0391
90.000		1.0620	.6963	.2155	-.0913	-.1417	.1261	.3519	.4151	-.4929	-.4916	-.1817	-.0819	-.0692	
120.000			.8047	.3201	-.0047	-.0697	-.1487	.3735	.4741	.0321	.2352	.1768	.0546	-.0571	-.1057
150.000							.3222			.2877		.1645		-.0699	
180.000			.8270	.3355	.0109	-.0552	-.2469	.2931	.3654	.4829	.3653	.1409	-.0675	-.2087	-.1785
210.000			.3170	-.0210	-.0896	-.2818	.2135	.3263	.4738	.3415	.1302	-.0710	-.2368	-.2135	
240.000	1.0740	1.1230	.7260	.2654	-.0627	-.1250	-.3115	.1557	.3107	.4535	.2781	.0361	-.1009	-.2798	-.2619
270.000		.6851							.4053						

K/LT .7460 .8530 .9280

## PM1

.000	-.0380	.0446	-.0651
30.000	-.0829	.0401	-.0450
60.000	-.0399	.0140	.0135
90.000	.0193	-.0891	
120.000	.0955	-.0509	.1611
150.000	.0932	-.0267	.0859
180.000	.0425	-.0168	.1513
210.000	.0236	-.0232	-.1296
240.000	-.0239	-.0243	-.1514

ALPHAT (1) = -0.690 BETAT (2) = -4.120

## SECTION (1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6370
PM1															
.000	1.1230	.7218	.3218	-.1444	-.4544	-.5058	-.1634	-.1069	.0336	.0370	-.1823	-.3666	-.0859	-.0375	-.0581
30.000			.3658	-.1134	-.4325	-.4885	-.4550	-.1094	.0058	-.1977	-.3648	-.2196	-.1558	-.1075	-.1010
60.000			.4622	-.0254	-.3571	-.4219	-.3394	-.0328	-.0353	-.4631	-.6628	-.3355	-.2089	-.0193	-.0558
90.000		.9838	.5962	.1092	-.2622	-.3324	-.0406	.3330	.4068	-.1934	-.5240	-.1796	-.0997	-.1053	
120.000			.7144	.2256	-.1691	-.2463	-.3232	.3425	.4864	.0987	.1800	-.1035	-.0228	-.1187	-.1930
150.000							.3023			.3069		.0925		-.1494	
180.000			.7712	.2762	.1215	-.2012	-.3172	.2815	.3947	.4550	.1910	.1159	-.1545	-.2844	-.2659

DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RBIT47)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+512425

ALPHAT (1) = -0.000 BETAT (2) = -4.120

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
165.000				.2761	-.1255	-.2062	-.3030	.8394	.3709	.4916	.2847	.0671	-.1495	-.2435	-.2511
180.000			.7513	.2475	-.1478	-.2211	-.3162	.1852	.3634	.5857	.2926	.0003	-.1475	-.2648	-.2641
270.000			.7849												.4009

X/LT .7480 .8530 .9280

PMI

.000	-.0425	.0470	-.1014
30.000	-.0477	.0427	-.0483
60.000	-.0130	.0382	.0567
90.000	.0216	.0236	
120.000	.0534	-.0331	.0339
135.000	.0392	-.0571	-.0314
150.000	-.0051	-.1006	.0077
165.000	.0003	-.0561	-.1975
180.000	-.0363	-.0570	-.2027

ALPHAT (1) = -0.680 BETAT (3) = .000

DEPENDENT VARIABLE C2

SECTION (1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PMI															
.000	1.1400	.7424	.3319	-.1526	-.4391	-.4974	-.1589	-.0985	.0486	.0651	-.1650	-.3823	-.0671	-.0228	-.0419
30.000			.3473	-.1215	-.4317	-.4957	-.3911	-.1087	.0341	-.0907	-.3222	-.2615	-.1087	-.0836	-.0810
60.000			.4001	-.0890	-.4020	-.4583	-.2397	-.1180	.0432	-.1690	-.6455	-.3002	-.2448	-.0844	-.0574
90.000		.8951	.4959	.0102	-.3313	-.4019	-.0627	.1417	.4089	-.4874	-.5491	-.1737	-.1204	-.1397	
120.000			.6124	.1265	-.2435	-.3227	-.4030	.2173	.5028	.1695	.1197	.0249	-.0773	-.1838	-.2358
135.000								.2182		.3232		.0225		-.2414	
150.000			.7067	.2088	-.1764	-.2346	-.3657	.2186	.4048	.4468	.0757	-.0916	-.2370	-.3785	-.3399
165.000				.2905	-.1441	-.2256	-.3291	.2137	.3859	.4897	.2271	.0315	-.0962	-.2434	-.2551
180.000	1.1400	1.1460	.7584	.2540	-.1392	-.2160	-.3140	.1807	.3854	.4793	.3044	-.0341	-.1174	-.2683	-.2638
270.000		.8915													.3985

X/LT 7480 .8530 .9280

PMI

.000	-.0219	.0402	-.1242
30.000	-.0382	.0476	-.0756
60.000	.0021	.0619	.1000
90.000	-.0064	.0194	
120.000	.0061	-.0350	-.1121
135.000	-.0161	-.0482	-.1779
150.000	-.0282	-.1234	-.1716



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(081747)

EXTERNAL TANK

ARC11-71.6 1A14 01+112-5.2N25

ALPHAT ( 1 ) = -0.000 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7400 .0330 .9200

Y/L

WE  
 165.000 -.0145 -.0816 -.2086  
 180.000 -.0219 -.0554 -.1907

ALPHAT ( 1 ) = -0.000 BETAT ( 4 ) = 4.150

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5500 .6300

Y/L

WE  
 .000 1.1230 .7245 .3226 -.1408 -.4345 -.5083 -.1657 -.1053 .0290 .0314 -.1831 -.3707 -.0909 -.0367 -.0507  
 30.000 .3096 -.1691 -.4809 -.5147 -.1732 -.1139 -.1139 -.0109 -.0344 -.2745 -.3364 -.0867 -.0909 -.0930  
 60.000 .3251 -.1436 -.4492 -.5042 -.1587 -.1434 .1213 -.2383 -.6276 -.2845 -.1957 -.1372 -.0935  
 90.000 .3902 -.0922 -.4158 -.4738 -.0845 -.0652 .4326 -.4984 -.5805 -.1959 -.1312 -.1577  
 120.000 .5014 .0162 -.3362 -.4056 -.3269 .0990 .5177 .2323 .0656 -.0398 -.1191 -.2406 -.2476  
 135.000 .6174 .1256 -.2978 -.3208 -.4306 .1346 .3165 -.0714 -.3031  
 150.000 .6174 .1256 -.2978 -.3208 -.4306 .1346 .4062 -.0643 -.2537 -.3333 -.4899 -.3166  
 165.000 .7481 .1998 -.1864 -.2603 -.3657 .1649 .4924 .1966 -.0052 -.1072 -.2145 -.2468  
 180.000 1.1230 1.1400 .7481 .2411 -.1492 -.2239 -.3220 .1728 .4501 .3034 -.0417 -.1224 -.2890 -.2927  
 271.000 .9824 .3966

X/LT .7400 .9530 .9200

Y/L

WE  
 .000 -.0445 .0495 -.1042  
 30.000 -.0554 .0416 -.1018  
 60.000 -.0210 .0679 .0721  
 90.000 -.0760 -.0744  
 120.000 -.0728 -.0845 -.2037  
 135.000 -.0958 -.0968 -.2761  
 150.000 -.1149 -.1891 -.2898  
 165.000 -.0841 -.0983 -.3050  
 180.000 -.0715 -.1056 -.3958

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

(R01747)

EXTERNAL TANK

ARC1:-716 IA14 OR-T12-S12H25

ALPHAT(1) = -0.720 BETAT(1) = 0.320

DEPENDENT VARIABLE C<sub>P</sub>

SECTION (1) EXTERNAL TANK	0.000	0.0490	0.1130	0.1780	0.1940	0.2150	0.2420	0.2900	0.3440	0.3940	0.4510	0.5050	0.5580	0.6380
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580
PHI	.000	1.0650	.6675	.2832	-.1713	-.4737	-.9277	-.1582	-.1176	-.0047	-.0136	-.2149	-.1255	-.0760
30.000				.2555	-.2078	-.4843	-.5360	-.1306	-.1117	-.0661	-.1028	-.2742	-.3681	-.0885
60.000				.2551	-.2105	-.4838	-.4354	-.1365	-.1471	.0874	-.1976	-.6132	-.2600	-.1320
90.000				.6822	-.1700	-.4721	-.4783	-.1216	-.2030	.4473	-.4800	-.5023	-.2714	-.1417
120.000				.5873	-.0425	-.4096	-.4776	-.2230	.0024	.5193	.2657	-.0472	-.0751	-.2958
150.000				.5203	-.0391	-.3159	-.3825	-.4852	.0244	.2910	.2910	-.1249	-.3695	-.3506
180.000				.7212	-.1486	-.2245	-.2988	-.3961	.0495	.3737	.1614	-.0158	-.1156	-.2958
210.000				.9280	.2232	-.1618	-.2368	-.3048	.1107	.4006	.2905	-.0063	-.1718	-.3336
K/LT	.7460	.8530	.9280						.3997					

PHI	.000	-.0534	.0492	-.0849
30.000		-.0433	.0594	-.0988
60.000		-.0350	.0800	-.0569
90.000		-.1689	-.2487	
120.000		-.1384	-.1108	-.2247
150.000		-.1696	-.1075	-.2859
180.000		-.1890	-.1911	-.3080
210.000		-.1659	-.1243	-.3293
K/LT	.7460	.8530	.9280	

ALPHAT(2) = -4.340 BETAT(2) = -0.300

DEPENDENT VARIABLE C<sub>P</sub>

SECTION (1) EXTERNAL TANK	0.000	0.0490	0.1130	0.1780	0.1940	0.2150	0.2420	0.2900	0.3440	0.3940	0.4510	0.5050	0.5580	0.6380
K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580
PHI	.000	1.1300	.7902	.4044	-.0906	-.4118	-.4700	-.5320	-.1076	-.0328	-.2479	-.2643	-.0913	-.0484
30.000				.4998	.0121	-.3337	-.4077	-.4867	-.0930	-.2357	-.3616	-.1626	-.1497	-.1165
60.000				.6255	.1304	-.2391	-.3137	-.4162	.0977	-.4750	-.5743	-.2832	-.1278	-.0138
90.000				1.1160	.7276	-.2302	-.1603	-.2390	.3729	.9008	-.6064	-.4853	-.1276	-.0479
120.000				.7601	.2674	-.1338	-.2146	-.3090	.2891	.3805	-.1254	.1320	.1804	-.0447
150.000				.7521	.2316	-.1603	-.2383	-.3485	.2052	.1437	.2610	.1235	-.0782	-.2039
180.000				.6155	.1751	-.2100	-.2859	-.3828	.2696	.3574	.2934	.1062	-.0633	-.2319
210.000				.7537	.1150	-.2485	-.3249	-.4058	.2402	.3996	.2934	.0139	-.1119	-.2833
K/LT	.7460	.8530	.9280						.2391	.4050	.2334			

441

DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI14A - VOL. 9

(R91747)

EXTERNAL TANK

ARC11-716 IAI14 DE+T12+S12N25

ALPHAT ( 2 ) = -4.340 BETAT ( 1 ) = -0.303

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7460 .8530 .9280

PMI  
 .000 -.0959 .0450 -.0895  
 30.000 -.0896 .0508 -.0585  
 60.000 -.0190 .1254 .0523  
 90.000 .0450 .1127 .1756  
 120.000 .0946 .1276 .1756  
 150.000 .1039 .1161 .1125  
 180.000 .0612 .0830 .1911  
 165.000 .0511 .0949 -.1284  
 190.000 .0149 .0809 -.1528

ALPHAT ( 2 ) = -4.320 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2190 .2420 .2950 .3440 .3940 .4510 .5090 .5580 .6380

PMI  
 .000 1.1810 .8373 .4286 -.0653 -.3889 -.4504 -.5225 -.0782 .0451 .0319 -.1672 -.3445 -.0525 .0000 -.0325  
 30.000 .4772 -.0191 -.3532 -.4220 -.4960 -.0806 .0936 -.1264 -.2987 -.2234 -.1135 -.0884 -.0629  
 60.000 .5516 .0529 .3004 .3680 .4680 .0326 .1497 -.4365 .5653 .2467 .1933 .0276 .0167  
 90.000 1.0320 .6277 .1295 .2439 .3148 .3997 .2740 .5097 .5899 .5243 .1444 .0715 .0773  
 120.000 .6751 .1776 .2062 .2831 .3765 .1943 .4202 -.0555 .0773 .0973 .0107 .1027 .1708  
 150.000 .6094 .1430 .2023 .2731 .3866 .1205 .3263 .3752 .1027 .1003 .1420 .2801 .2406  
 180.000 .5625 .1627 .2127 .2900 .3906 .0777 .3032 .4255 .2369 .0477 .1442 .2486 .2201  
 165.000 1.1810 1.0610 .6455 .1333 .2372 .3086 .4023 .2856 .4293 .2480 .0176 .1525 .2776 .2275  
 190.000 .8446 .5675

K/LT .7460 .8530 .9280

PMI  
 .000 -.0698 .0479 -.0919  
 30.000 -.0690 .0675 -.0430  
 60.000 -.0236 .1045 .0709  
 90.000 .0093 .1180 .0790  
 120.000 .0513 .0623 .0790  
 150.000 .0441 .0461 .0320  
 180.000 .0085 .0028 .0040  
 165.000 .0237 .0339 -.1866  
 190.000 .0076 .0143 .1915



DATE 16 JUL 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 CR+T12+S12+23 (RB1747)

ALPHA ( 2 ) = -4.360 BETAT ( 3 ) = .0000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

Y/L	.0000	.0060	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5560	.6300
Wt	1.1900	.6907	.4339	-.0551	-.3486	-.4517	-.5211	-.0726	.0636	.0619	-.1630	-.3390	-.0325	.0160	-.0211
30.000			.4403	-.0317	-.3790	-.4429	-.5134	-.0699	.0639	-.0296	-.2478	-.3261	-.0643	-.0201	-.0579
60.000			.4765	-.0310	-.3580	-.4212	-.5129	-.0497	.2099	-.3575	-.5531	-.2042	-.1253	-.0935	-.0486
90.000		.9436	.5255	.0279	-.3253	-.3925	-.2687	.0941	.5303	-.5692	-.1598	-.0940	-.1178		
120.000			.5913	.0834	-.2940	-.3550	-.4120	.0937	.4318	.0241	.0277	.0006	-.0646	-.1604	-.2261
150.000			.6304	.1235	-.2525	-.3218	-.4300	.0909	.3267	.3558	.0151	-.1300	-.2217	-.3421	-.3085
180.000			.1592	-.2370	-.3134	-.4065	.0851	.3049	.4132	.1751	-.0079	-.1149	-.2526	-.2519	
210.000	1.1900	1.0630	.6403	.1387	-.2377	-.3056	-.4028	.0538	.2996	.4096	.2506	-.0723	-.1313	-.2706	-.2275
270.000		.9432													

K/LT .7400 .8530 .9200

Wt	1.1900	.6907	.4339	-.0551	-.3486	-.4517	-.5211	-.0726	.0636	.0619	-.1630	-.3390	-.0325	.0160	-.0211
30.000			.4403	-.0317	-.3790	-.4429	-.5134	-.0699	.0639	-.0296	-.2478	-.3261	-.0643	-.0201	-.0579
60.000			.4765	-.0310	-.3580	-.4212	-.5129	-.0497	.2099	-.3575	-.5531	-.2042	-.1253	-.0935	-.0486
90.000		.9436	.5255	.0279	-.3253	-.3925	-.2687	.0941	.5303	-.5692	-.1598	-.0940	-.1178		
120.000			.5913	.0834	-.2940	-.3550	-.4120	.0937	.4318	.0241	.0277	.0006	-.0646	-.1604	-.2261
150.000			.6304	.1235	-.2525	-.3218	-.4300	.0909	.3267	.3558	.0151	-.1300	-.2217	-.3421	-.3085
180.000			.1592	-.2370	-.3134	-.4065	.0851	.3049	.4132	.1751	-.0079	-.1149	-.2526	-.2519	
210.000	1.1900	1.0630	.6403	.1387	-.2377	-.3056	-.4028	.0538	.2996	.4096	.2506	-.0723	-.1313	-.2706	-.2275
270.000		.9432													

ALPHA ( 2 ) = -4.360 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

Y/L	.0000	.0060	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5560	.6300
Wt	1.1790	.9371	.4255	-.0665	-.3866	-.4520	-.5233	-.0767	.0423	.0260	-.1697	-.3393	-.0572	.0003	-.0309
30.000			.3997	-.0827	-.4031	-.4666	-.5022	-.0765	.0111	.0021	-.2354	-.3226	-.0519	-.0136	-.0421
60.000			.5956	-.0866	-.4017	-.4602	-.4920	-.0785	.1425	-.3059	-.5351	-.1589	-.0757	-.0742	-.0906
90.000		.8460	.4231	-.0664	-.3871	-.4513	-.5074	-.0740	.5725	-.5316	-.4971	-.1624	-.1005	-.1336	
120.000			.4793	-.0728	-.3545	-.4176	-.4630	-.0215	.2493	.1231	-.0016	-.0470	-.1096	-.2098	-.2230
150.000			.5931	.0518	-.3017	-.3717	-.2934	.0161	.2636	.2636	-.0869	-.0869	-.2694		
180.000			.5931	.0518	-.3017	-.3717	-.2934	.0161	.2631	.3435	-.1000	-.2659	-.3126	-.4406	-.3043
210.000	1.1790	1.0630	.6406	.1372	-.2616	-.3366	-.4321	.0628	.2729	.3971	.1525	-.0430	-.1155	-.1910	-.2324
270.000		.9371							.2639	.3813	.2600	-.0682	-.1243	-.2461	-.2651

K/LT .7400 .8530 .9200

Wt	1.1790	.9371	.4255	-.0665	-.3866	-.4520	-.5233	-.0767	.0423	.0260	-.1697	-.3393	-.0572	.0003	-.0309
30.000			.3997	-.0827	-.4031	-.4666	-.5022	-.0765	.0111	.0021	-.2354	-.3226	-.0519	-.0136	-.0421
60.000			.5956	-.0866	-.4017	-.4602	-.4920	-.0785	.1425	-.3059	-.5351	-.1589	-.0757	-.0742	-.0906
90.000		.8460	.4231	-.0664	-.3871	-.4513	-.5074	-.0740	.5725	-.5316	-.4971	-.1624	-.1005	-.1336	
120.000			.4793	-.0728	-.3545	-.4176	-.4630	-.0215	.2493	.1231	-.0016	-.0470	-.1096	-.2098	-.2230
150.000			.5931	.0518	-.3017	-.3717	-.2934	.0161	.2636	.2636	-.0869	-.0869	-.2694		
180.000			.5931	.0518	-.3017	-.3717	-.2934	.0161	.2631	.3435	-.1000	-.2659	-.3126	-.4406	-.3043
210.000	1.1790	1.0630	.6406	.1372	-.2616	-.3366	-.4321	.0628	.2729	.3971	.1525	-.0430	-.1155	-.1910	-.2324
270.000		.9371							.2639	.3813	.2600	-.0682	-.1243	-.2461	-.2651



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(081747)

EXTERNAL TANK

ARC11-716 1A14 06+112+312N25

ALPHAT (2) = -4.340 BETAT (4) = 1.120

DEPENDENT VARIABLE C0

SECTION (1) INTERNAL TANK

R/L 1.180 0.930 .9200

TIME  
0.000 -0.715 .0462 -.0932  
30.000 -0.980 .0821 -.0869  
60.000 -0.935 .0711 .0537  
90.000 -0.933 .0132  
120.000 -0.625 -.0249 -.1995  
150.000 -0.670 -.0258 -.2316  
180.000 -0.777 -.1178 -.2431  
210.000 -0.566 -.0396 -.2413  
240.000 -0.461 -.0362 -.3607

ALPHAT (2) = -4.400 BETAT (5) = 0.270

SECTION (1) INTERNAL TANK

R/L 0.930 0.990 0.490 .1130 .1780 .1940 .2190 .2420 .3440 .3040 .4510 .5090 .5360

TIME  
0.000 1.0000 .7817 .3090 -.0955 -.4109 -.4709 -.5121 -.1116 .0002 -.0621 -.2499 -.2511 -.0933 -.0524 -.0033  
30.000 .3274 -.1384 -.4426 -.5050 -.1567 -.0967 -.0266 -.0740 -.2872 -.2369 -.0584 -.0336 -.0632  
60.000 .3066 -.1697 -.4511 -.5031 -.1272 -.0975 .0795 -.2361 -.4626 -.1339 -.0626 -.0613 -.0977  
90.000 .3221 -.1398 -.4444 -.1454 -.0802 -.0567 .4233 -.3342 -.2826 -.1098 -.1278 -.1697  
120.000 .3777 -.1174 -.4191 -.3370 -.0504 .2119 .1212 .0043 -.0946 -.1763 -.2715 -.2570  
150.000 .4527 -.0264 -.3623 -.4274 -.2316 -.0431 .2349 .2631 .1421 .3207 .4662 .5292 .3110  
180.000 .0523 -.3024 .3745 .4709 .0209 .1958 .3194 .1202 .0350 .1360 .2962 .2938  
210.000 .1114 .2730 .5302 .4231 .0394 .1844 .3255 .2551 .0372 .1857 .3430 .3326  
240.000 1.1240 .9098 .5146 .1114 .2730 .5302 .4231 .0394 .1844 .3255 .2551 .0372 .1857 .3430 .3326  
270.000 1.1150 .4306

R/L 1.180 0.930 .9200

TIME  
0.000 -0.996 .0468 -.0932  
30.000 -0.965 .0701 -.0869  
60.000 -0.969 .0794 .0417  
90.000 -0.1125 .0773  
120.000 -0.930 .0244 .2031  
150.000 -0.1161 .0258 .1257  
180.000 -0.1342 .1147 .0741  
210.000 -0.1225 .0674 .1209  
240.000 -0.1251 .0733 .1427

DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 4954

ARC11-716 IAI4 OL+712+912N25

EXTERNAL TANK

(R01747)

ALPHAT( 3) = -.310 BETAT ( 1) = -8.320

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.1430	.8782	.4967	.0007	-.3396	-.4074	-.4923	-.1643	.0401	-.0236	-.2249	-.2208	-.1368	-.0358	-.0689
30.000			.6074	.1125	-.2364	-.3339	-.4186	-.0892	.0719	-.1626	-.2922	-.1360	-.1297	-.1044	-.0321
60.000			.7036	.2048	-.1782	-.2550	-.3662	.1700	.2170	-.3630	-.3547	-.1668	-.1377	.0039	.0840
90.000		1.1360	.7499	.2439	-.1465	-.2283	-.3219	.3684	.5236		-.3717	-.4889	-.1676	-.0741	-.0061
120.000			.7090	.2152	-.1733	-.2536	-.3490	.1837	.2685	-.2779	-.1514	.2161	.1302	.0073	-.0287
135.000								.0789		-.0403		.1285		-.0197	
150.000			.6412	.1452	-.2300	-.3066	-.4141	.0163	.1569	-.2506	.2139	.0650	-.0373	-.1569	-.1033
165.000				.0731	-.2865	-.3996	-.4519	-.0215	.1456	.3261	.2318	.0901	-.0216	-.1818	-.1107
180.000		1.1430	.9345	.0162	-.3206	-.3952	-.4707	-.0388	.1453	.3431	.1856	.0019	-.0966	-.2209	-.1647
270.000			.7462						.5628						

K/LT .7460 .8330 .9280

PHI

.000	-.0990	.0377	-.0971
30.000	-.0597	.0720	-.0653
60.000	.0096	.1599	.0591
90.000	.0636	.1561	
120.000	.1182	.2273	.2131
135.000	.1241	.2178	.1399
150.000	.0907	.1636	.2177
165.000	.0984	.1659	-.1016
180.000	.0611	.1181	-.1407

ALPHAT( 3) = -.290 BETAT ( 2) = -4.180

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.1990	.9370	.5304	.0223	-.3183	-.3875	-.4680	-.2521	.1071	.0375	-.1714	-.2788	-.1010	.0100	-.0080
30.000			.5819	.0743	-.2795	-.3545	-.4330	-.1661	.1424	-.0557	-.2331	-.1969	-.1072	-.0350	-.0390
60.000			.6305	.1220	-.2435	-.3146	-.4208	.0703	.2641	-.3133	-.4197	-.1487	-.0922	-.0918	-.0006
90.000		1.0560	.652	.1430	-.2290	-.3038	-.4009	.2656	.5374		-.5753	-.5583	-.2004	-.0988	-.0374
120.000			.6277	.1313	-.2410	-.3151	-.4377	.0944	.3191	-.2080	-.1078	.0899	.0316	-.0567	-.1108
135.000								.0345		.0697		.0162		-.0830	
150.000			.5995	.0974	-.2671	-.3377	-.4415	.0038	.2273	.2951	.0568	.0365	-.0496	-.2104	-.1758
165.000				.0639	-.2917	-.3617	-.4564	-.0109	.1943	.3437	.1880	.0012	-.0673	-.2077	-.1587
180.000		1.1990	.9706	.0315	-.3100	-.3806	-.4637	-.0400	.1771	.3344	.2032	-.0595	-.0191	-.2282	-.1657
270.000			.8573						.5988						

K/LT .7460 .8330 .9280

PHI

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DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4855

ARC11-716 1A14 Q1-T12-S12M25

EXTERNAL TANK

(RB1747)

ALPHAT ( 3 ) = -.290 BETAT ( 2 ) = -4.190

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	-.0549	.0553	-.0775
30.000	-.0464	.0773	-.0530
60.000	-.0012	.1370	.0359
90.000	.0397	.1594	
120.000	.0777	.1698	.1473
135.000	.0790	.1540	.0784
150.000	.0582	.1000	.1630
165.000	.0643	.1158	-.1651
180.000	.0357	.0870	-.1741

ALPHAT ( 3 ) = -.610 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5980 .6380

PHI

.000	1.2160	.9462	.5294	.0182	-.3202	-.3682	-.4678	-.2928	.1226	.0815	-.1487	-.2853	-.0907	.0208	.0063
30.000			.5326	.0193	-.3221	-.3905	-.4664	-.0782	.1099	.0303	-.2078	-.2993	-.0769	.0023	-.0133
60.000			.5321	.0210	-.3102	-.3813	-.4784	-.0036	.3150	-.2614	-.4185	-.1837	-.0464	-.0268	-.0299
90.000		.9612	.5397	.0336	-.3127	-.3795	-.4683	.0958	.5655		-.6211	-.3606	-.1661	-.0939	-.0729
120.000			.5476	.0427	-.3086	-.3781	-.4635	.0380	.3758	-.1145	-.1447	.0138	-.0256	-.1241	-.1742
135.000								.0392		.1554		-.0776		-.1613	
150.000			.5571	.0477	-.3044	-.3689	-.4712	.0346	.1967	.3073	-.0502	-.1322	-.1521	-.2813	-.2547
165.000				.0519	-.3083	-.3706	-.4610	.0326	.1912	.3206	.1412	-.0553	-.0827	-.2037	-.1859
180.000	1.2160	.9784	.5583	.0464	-.3028	-.3696	-.4570	.0002	.1877	.3195	.2142	-.0994	-.0950	-.1788	-.1843
270.000		.9623													

X/LT .7460 .8530 .9280

PHI

.000	-.0363	.0770	-.0616
30.000	-.0388	.0809	-.0474
60.000	-.0224	.1095	.0243
90.000	.0179	.1299	
120.000	.0516	.1015	.0213
135.000	.0373	.0900	-.0650
150.000	.0130	.0275	-.0474
165.000	.0347	.0714	-.1817
180.000	.0377	.0717	-.1902

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ARC11-716 1A14 CR+T12+S12M25 (R81747)

ALPHAT ( 3 ) = -.200 BETAT ( 4 ) = 4.140

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1980	.9333	.5256	.0180	-.3220	-.3925	-.4743	-.2918	.1087	.0511	-.1728	-.2778	-.1078	.0091
30.000				.4740	-.0318	-.3555	-.4261	-.4959	-.0448	.0636	.0101	-.2146	-.3250	-.0671	-.0008
60.000				.4459	-.0545	-.3725	-.4356	-.5142	-.0537	.2752	-.1918	-.3633	-.1981	-.0667	-.0051
90.000			.8613	.4327	-.0554	-.3842	-.4486	-.1983	-.0180	.6058	-.0343	-.0352	-.0269	-.0532	-.1299
120.000				.4486	-.0464	-.3734	-.4374	-.1507	-.0262	.2375	-.0343	-.0308	-.0063	-.0562	-.1624
135.000								-.0173		.1706		-.0950		-.2024	
150.000				.4822	-.0253	-.3528	-.4177	-.1381	-.0101	.1174	.2317	-.1599	-.2428	-.3692	-.2631
165.000					.0984	-.3709	-.4035	-.4506	-.0119	.1516	.2744	.1023	-.0898	-.0767	-.1821
180.000	1.1980	.9719	.5384	.0280	-.3161	-.3880	-.4748	.0055	.1724	.2895	.2206	-.1190	-.0895	-.1986	-.2001
270.000		1.0550							.5363						

X/LT .7460 .8530 .9280

PHI

.0000	-.0608	.0608	-.0713
30.000	-.0559	.0660	-.0572
60.000	-.0456	.0932	.0670
90.000	-.0309	.0720	
120.000	-.0027	.0369	-.1084
135.000	-.0179	.0238	-.1889
150.000	-.0254	-.0492	-.1923
165.000	-.0083	.0193	-.2490
180.000	.0018	.0272	-.3465

ALPHAT ( 3 ) = -.210 BETAT ( 5 ) = 8.290

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.0000	1.1450	.8805	.4902	-.0006	-.3396	-.4114	-.4937	-.1426	.0489	-.0347	-.2229	-.2253	-.1597	-.0387
30.000				.3979	-.0885	-.4104	-.4703	-.5272	-.0805	.0433	-.0404	-.2442	-.2815	-.0553	-.0064
60.000				.3516	-.1260	-.4352	-.4907	-.1820	-.1045	.1015	-.1295	-.3193	-.1748	-.0820	-.0666
90.000		.7538		.3329	-.1490	-.4435	-.5001	-.1307	-.0841	.6525	-.5168	-.0635	-.0240	-.0838	-.2055
120.000				.3500	-.1184	-.4352	-.4942	-.0944	-.0726	.0674	.0501	-.1576	-.0791	-.1158	-.2123
135.000								-.0517		.0772		-.1390		-.2572	
150.000				.4036	-.0885	-.4082	-.4652	-.0645	-.0429	.0959	.2459	-.1512	-.3184	-.3335	-.4203
165.000					-.0386	-.3710	-.4349	-.1867	-.0445	.1255	.2413	.0707	-.1007	-.1227	-.2491
180.000	1.1450	.8711	.5129	.0097	-.3288	-.4022	-.4915	.0046	.1029	.2405	.1942	-.0762	-.1410	-.3088	-.2725
270.000		1.1360							.5240						

X/LT .7460 .8530 .9280

PHI



DATE 08 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4937

(RB1747)

EXTERNAL TANK

ARC11-716 1A14 OL+T12+S12N25

ALPHAT( 3 ) = -.210 BETAT ( 5 ) = 8.290

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .8530 .9280

PMI

.000	-.1020	.0393	-.0965
30.000	-.0742	.0606	-.0819
60.000	-.0684	.0847	.0570
90.000	-.1210	-.0031	
120.000	-.0476	.0132	-.1379
135.000	-.0653	.0107	-.2118
150.000	-.0841	-.0787	-.2430
165.000	-.0655	-.0212	-.2689
180.000	-.0724	-.0356	-.4151

ALPHAT( 4 ) = 4.030 BETAT ( 1 ) = -0.310

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.000	1.1320	.9745	.9998	.1015	-.2654	-.3374	-.4279	-.3632	.0817	.0012	-.1593	-.1940	-.1373	-.0331	-.0356
30.000			.7124	.2112	-.1779	-.2584	-.3480	-.0092	.1383	-.0828	-.1397	-.1413	-.0731	-.0402	-.0116
60.000			.7682	.2692	-.1326	-.2094	-.3236	.2302	.3207	-.2316	-.2362	-.1306	.0078	-.0149	.0125
90.000		1.1190	.7356	.2384	-.1562	-.2358	-.3346	.3501	.4986	-.4098	-.3107	-.3006	-.2325	-.0584	
120.000			.6329	.1410	-.2369	-.3132	-.4951	.0773	.1216	-.4227	-.4969	-.2245	.2231	.1102	.0316
135.000							-.0494			-.2449		-.1318		.0698	
150.000			.5313	.0371	-.3145	-.3843	-.4868	-.0897	.0314	.1945	.0428	-.1489	.0653	-.0838	-.0561
165.000				-.0367	-.3693	-.4411	-.5253	-.0719	.0495	.2724	.1414	-.0238	.0265	-.1138	-.0620
180.000	1.1320	.8516	.4093	-.0840	-.4020	-.4631	-.3788	-.1148	.0801	.2718	.1281	-.0781	-.0175	-.1808	-.1018
270.000		.7336													.6422

X/LT .7480 .8530 .9280

PMI

.000	-.0785	.0359	-.1147
30.000	-.0216	.0866	-.0758
60.000	.0363	.1642	.0411
90.000	.0564	.0813	
120.000	.1641	.2975	.2487
135.000	.1681	.2812	.1692
150.000	.1330	.2033	.2593
165.000	.1395	.2003	-.0911
180.000	.1024	.1462	-.1445

ORIGINAL PAGE IS  
OF POOR QUALITY

ARC11-716 1A14 OR-T12+S12N25

EXTERNAL TANK

11747

ALPHAT ( 4 ) = 4.040 BETAT ( 2 ) = -4.140

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1870	1.0350	.6399	.1318	-.2403	-.3126	-.4035	-.3524	.1723	.0906	-.1109	-.2085	-.1385	.0109	.0237
30.000			.0842	.1759	-.2059	-.2851	-.3725	-.2279	.2092	.0229	-.1356	-.1922	-.1004	.0088	.0252
60.000			.0812	.1765	-.2023	-.2755	-.3656	-.1245	.3575	-.1904	-.2463	-.1972	-.0318	.0112	.0282
90.000		1.0370	.6338	.1357	-.2392	-.3126	-.4093	.2409	.5032	-.4992	-.2829	-.0102	-.0468	-.0385	
120.000			.5593	.0596	-.2973	-.3657	-.4517	.0137	.1872	-.3345	-.4343	-.2197	.0892	.0329	-.0479
135.000								-.0374		-.0470		-.2190		.0040	
150.000				.4978	-.0015	-.3395	-.4068	-.5041	.1256	.2398	.0531	-.2074	-.0287	-.1163	-.1103
165.000					-.0409	-.3716	-.4347	-.5192	.0931	.2818	.1398	-.0620	-.0468	-.0833	-.0930
180.000	1.1870	.8651	.4333	-.0661	-.3824	-.4483	-.2252	-.0814	.0823	.2376	.1653	-.0867	-.0403	-.0504	-.1006
270.000		.8474							.5734						
K/LT	.7480	.8530	.9280												

ALPHAT ( 4 ) = 4.040 BETAT ( 3 ) = .010

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0080	.0480	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2020	1.0480	.6440	.1372	-.2372	-.3100	-.3989	-.3434	.1993	.1171	-.1033	-.2069	-.1248	.0130	.0319
30.000			.6297	.1205	-.2514	-.3265	-.4091	-.2343	.2020	.0823	-.1172	-.2023	-.1010	.0031	.0131
60.000			.5858	.0794	-.2820	-.3512	-.4511	.0454	.3707	-.1305	-.2461	-.1430	-.0648	-.0182	-.0082
90.000		.9439	.5278	.0281	-.3198	-.3895	-.4763	.0728	.5703	-.2847	-.5859	-.2400	-.0912	-.0973	-.0665
120.000			.4801	-.0199	-.3495	-.4167	-.5009	-.0312	.2553	-.2847	-.3994	-.1283	.0190	-.0395	-.0946
135.000								-.0376		.0197		-.2531		-.0818	
150.000			.4553	-.0436	-.3684	-.4368	-.5230	-.0457	.1056	.2476	-.0431	-.2224	-.0811	-.1734	-.1619
165.000				-.0489	-.3760	-.4419	-.5295	-.0581	.0823	.2109	.1360	-.1514	-.0317	-.1179	-.1115
180.000	1.2020	.8560	.4431	-.0377	-.3916	-.4453	-.2305	-.0515	.0907	.2421	.1634	-.1472	-.0675	-.1163	-.1077
270.000		.9475							.5295						
K/LT	.7480	.8530	.9280												

PMI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1747)

EXTERNAL TANK

ARC11-716 1A14 C1-T12-S12M25

ALPHAT ( 4 ) = 4.040 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7460 .8330 .9290

PMI	
.000	-.0064 .1069 -.0130
30.000	-.0082 .1131 -.0195
60.000	-.0037 .1303 .0645
90.000	.0308 .1452
120.000	.0897 .1629 .0443
135.000	.0802 .1489 -.0409
150.000	.0562 .0945 -.0029
165.000	.0779 .1254 -.1825
180.000	.0797 .1238 -.1895

ALPHAT ( 4 ) = 4.030 BETAT ( 4 ) = 4.180

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5090 .6300

PMI	
.000	1.1870 1.0260 .6304 .1282 -.2410 -.3160 -.4055 -.3511 .1688 .0825 -.1135 -.2082 -.1358 .0083 .0269
30.000	.5551 .0349 -.2986 -.3728 -.2499 -.0450 .1512 .0922 -.1799 -.2041 -.1162 -.0012 .0146
60.000	.4824 -.0215 .3931 .4162 .5041 .0150 .2019 -.0505 -.2614 -.0991 -.0719 -.0206 -.0136
90.000	.8495 .4268 -.0804 -.3826 .4494 .2448 .5834 .5834 .6027 .1272 .1130 .1119 .0346
120.000	.3998 -.0739 .4014 .4635 .2995 .0675 .2337 -.1893 .1133 .1133 .0487 .0367 .1157 .1138
135.000	.4073 -.0759 .4005 .4591 .1727 .0698 .0456 .2102 .0862 .2722 .1323 .1263 .2036
150.000	-.0678 .3883 .4536 .1431 .0547 .0766 .2237 .0662 .1304 .0665 .0982 .1031
165.000	1.1870 .8731 .4386 -.3823 .4474 .2882 .1022 .1742 .1680 .0605 .1117 .1167
180.000	1.0450 .5116

K/LT .7460 .8330 .9290

PMI	
.000	-.0221 .0829 -.0069
30.000	-.0281 .0981 -.0242
60.000	-.0354 .1016 .0332
90.000	.0180 .1174
120.000	.0433 .0836 -.0702
135.000	.0272 .0664 .1660
150.000	.0174 -.0064 .1672
165.000	.0329 .0538 .2227
180.000	.0415 .0547 .3266



(R01747)

EXTERNAL TANK

ARC11-716 1A14 04+712+812+25

ALPHAT( 4) = 4.040 BETAT( 5) = 8.380

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.8380
PHI															
.000	1.1310	.9758	.9980	.1068	-.2821	-.3370	-.4259	-.3529	.0816	-.0165	-.1403	-.2079	-.1775	-.0283	-.0287
30.000			.4661	-.0224	-.3556	-.4275	-.5046	-.0642	.1194	.0663	-.1740	-.2070	-.0947	.0132	-.0213
60.000			.3716	-.1130	-.4262	-.4781	-.1250	-.0831	.0198	.0208	-.2564	-.1331	-.0895	-.0254	-.0338
90.000		.7345	.3232	-.1363	-.4478	-.5018	-.1347	-.0987	.6312	-.5046	-.0611	-.1126	-.0970	-.0959	
120.000			.3130	-.1615	-.4538	-.5078	-.1381	-.0996	.0897	-.1033	-.3037	-.0915	-.0996	-.1666	-.1311
135.000								-.0996		.0961		-.1992		-.1905	
150.000			.3344	-.1388	-.4452	-.4993	-.1158	-.0858	-.0034	.1314	-.1638	-.3336	-.2086	-.3212	-.2011
165.000				-.1146	-.4294	-.4850	-.1370	-.0793	.0748	.1810	.0307	-.1753	-.1119	-.1981	-.1914
180.000	1.1310	.7908	.4117	-.0824	-.4055	-.4676	-.3432	-.0547	.0454	.1878	.1304	-.1768	-.0952	-.2356	-.2002
270.000		1.1230							.4982						

K/LT .7480 .8330 .9280

PHI

.000	-.0757	.0341	-.0824
30.000	-.0632	.0742	-.0801
60.000	-.0620	.0901	.0197
90.000	-.0192	.0926	
120.000	.0024	.0347	-.0958
135.000	-.0205	.0432	-.1939
150.000	-.0418	-.0475	-.2198
165.000	-.0216	.0103	-.2581
180.000	-.0457	-.0141	-.4180

ALPHAT( 5) = 8.100 BETAT( 1) = -8.310

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5980	.8380
PHI															
.000	1.0920	1.0330	.7030	.2046	-.1797	-.2556	-.3516	-.2413	.0990	.0368	-.0797	-.1231	-.1273	-.0844	.0033
30.000			.8091	.3093	-.0940	-.1755	-.2715	.1242	.1943	-.0047	-.0518	-.0792	-.0380	-.0028	-.0504
60.000			.8146	.3179	-.0869	-.1622	-.2795	.3005	.3964	-.1464	-.1265	-.1142	.0214	.0615	.0685
90.000		1.0733	.7069	.2215	-.1710	-.2483	-.1931	.3242	.4097	-.3681	-.2652	-.0269	.0532	.0498	
120.000			.5458	.0686	-.2987	-.3797	-.4420	-.0298	-.0345	-.1955	-.3855	-.2686	.0316	.1194	.0800
135.000								-.1062		-.1277		-.2639		.1110	
150.000			.4257	-.0608	-.3906	-.4570	-.5510	-.0989	-.0881	.1799	-.1231	-.2293	-.0012	-.0133	.0031
165.000				-.1216	-.4394	-.5031	-.2584	-.1228	-.0248	.1934	.0817	-.0542	-.0144	-.0141	.0097
180.000	1.0920	.7458	.3138	-.1584	-.4641	-.5182	-.1419	-.1165	.0007	.1724	.0882	-.1063	-.0345	-.0307	-.0290
270.000		.6883							.4440						

K/LT .7480 .8330 .9280

PHI

.000			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			
270.000			



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4981

(R01747)

EXTERNAL TANK

ARC11-716 1A14 CR+T12-S12M25

ALPHAT( 5) = 0.100 BETAT ( 1) = -0.310

SECTION ( 1)EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0530 .9200

PMI

.000 -.0329 .0617 -.0206  
 30.000 .0306 .1324 .0172  
 60.000 .0876 .2014 .1040  
 90.000 .1148 .2107  
 120.000 .1663 .2028 .1544  
 150.000 .1849 .2041 .1163  
 180.000 .1467 .1948 .2271  
 165.000 .1590 .1927 -.1155  
 100.000 .1222 .1491 -.1542

ALPHAT( 5) = 0.100 BETAT ( 2) = -4.160

SECTION ( 1)EXTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0000 .0000 .0490 .1130 .1790 .1940 .2130 .2420 .2900 .3440 .3940 .4310 .5030 .5300 .6300

PMI

.000 1.1340 1.1100 .7414 .2406 -.1572 -.2325 -.3206 -.2765 .2132 .1273 -.0510 -.1005 -.0874 -.0498 .0415  
 30.000 .7694 .2701 -.1331 -.2116 -.3033 -.1610 .2643 .0851 -.0958 -.0576 -.0436 -.0306 .0474  
 60.000 .7156 .2208 -.1716 -.2438 -.3582 .1894 .4210 -.0892 -.1363 -.0301 -.0132 -.0068 .0239  
 90.000 .9790 .6022 .1168 -.2579 -.3294 -.4294 .2382 .4183 .4361 -.1866 -.0672 -.0406 -.0219  
 120.000 .4748 -.0308 -.3534 -.4190 -.5097 -.0424 .0307 -.2138 -.4488 -.2931 .0181 .0991 .0143  
 150.000 .3941 -.0906 -.4137 -.4677 -.4863 -.0860 .0276 .1993 -.0661 -.2920 .0393 -.0715 -.0569  
 165.000 .1258 -.4392 -.4944 -.1382 -.1089 .0344 .1908 .0752 .0861 .0319 -.0467 -.0323  
 180.000 .3311 -.1434 -.4443 -.4965 -.1174 -.0876 .0405 .1801 .1406 -.1209 -.0717 -.0594 -.0485  
 270.000 .7940 .4829

W/LT .7400 .0530 .9200

PMI

.000 .0125 .1093 .0192  
 30.000 .0356 .1395 .0167  
 60.000 .0443 .1650 .0338  
 90.000 .0748 .1395  
 120.000 .1278 .2633 .1475  
 150.000 .1360 .2469 .0776  
 165.000 .1205 .1729 .1884  
 180.000 .1355 .1875 -.1462  
 190.000 .1102 .1559 -.1613

ARC11-716 1A14 Q1+712+512M25 (R81747)

ALPHAT ( 5 ) = 8.200 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1580	1.1300	.7463	.2454	-.1490	-.2277	-.3244	-.2688	.2479	.1546	-.0391	-.1098	-.0480	-.0037	.0525
30.000			.7057	.2086	-.1802	-.2808	-.3498	-.2931	.2747	.1302	-.1042	-.1058	-.0525	-.0034	.0394
60.000			.6094	.1148	-.2540	-.3293	-.4323	-.0740	.4225	-.0279	-.1575	-.0574	-.0229	-.0045	.0134
90.000		.8908	.4952	.0111	-.3368	-.4070	-.4934	.0319	.4266		-.4257	-.0884	-.0371	-.0810	-.0335
120.000			.4033	-.0780	-.4063	-.4646	-.5414	-.1095	.1069	-.1839	-.4928	-.2171	-.0297	-.0108	-.0382
135.000								-.1000	.0197			-.3114		-.0382	
150.000			.3584	-.1150	-.4283	-.4881	-.4670	-.1084	.0936	.2320	-.0646	-.2803	-.0731	-.1201	-.0937
165.000				-.1373	-.4389	-.4920	-.1752	-.1144	.0429	.2195	.1262	-.1470	-.0561	-.0721	-.0401
180.000	1.1580	.7423	.3395	-.1333	-.4415	-.4966	-.1321	-.1068	.0470	.2135	.1665	-.1598	-.0735	-.0635	-.0349
270.000		.9030							.4323						

X/LT .7480 .8530 .9280

PMI

.000	.0272	.1238	.0384
30.000	.0229	.1297	.0106
60.000	.0108	.1343	.0256
90.000	.0516	.1139	
120.000	.1048	.1916	.0510
135.000	.0963	.1749	-.0359
150.000	.0742	.1211	.0106
165.000	.1039	.1596	-.1750
180.000	.1050	.1454	-.1824

ALPHAT ( 5 ) = 8.150 BETAT ( 4 ) = 4.230

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.1410	1.1110	.7321	.2335	-.1566	-.2345	-.3301	-.2759	.2388	.1194	-.0538	-.1017	-.0915	-.0569	.0439
30.000			.6287	.1349	-.2368	-.3154	-.3995	-.3221	.2246	.1333	-.0980	-.1548	-.1343	-.0527	.0274
60.000			.5033	.0098	-.3334	-.3978	-.4999	.0326	.2775	.0405	-.1565	-.1677	-.0906	-.0031	.0339
90.000		.7952	.3947	-.0874	-.4110	-.4672	-.1696	-.0952	.4875		-.4363	-.3472	-.0049	-.0043	-.0484
120.000			.3353	-.1294	-.4409	-.4981	-.1980	-.1113	.1091	-.1024	-.4220	-.2155	-.0147	-.0300	-.0597
135.000								-.1034	.0936			-.2759		-.0631	
150.000			.3239	-.1592	-.4490	-.5018	-.1610	-.1040	.0217	.1948	-.0517	-.2830	-.1230	-.1334	-.1394
165.000				-.1492	-.4449	-.5008	-.1272	-.0954	.0410	.1919	.0797	-.1836	-.0766	-.0397	-.0415
180.000	1.1410	.7611	.3356	-.1375	-.4433	-.4992	-.1351	-.0950	.0434	.1937	.1473	-.1660	-.0730	-.0475	-.0615
270.000		.9010							.4226						

X/LT .7480 .8530 .9280

PMI



(RB1747)

EXTERNAL TANK

ARC11-716 IA14 DE+712+512N25

ALPHAT ( S ) = 0.190 BETAT ( A ) = 4.230

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

W/LT .7400 .0530 .9260

PHI  
 .000 .0093 .0909 .0201  
 30.000 -.0154 .1043 .0223  
 60.000 .0035 .1459 .1052  
 90.000 .0230 .1452  
 120.000 .0714 .1141 -.0734  
 135.000 .0671 .1012 -.1486  
 150.000 .0565 .0273 -.1423  
 165.000 .0729 .0861 -.2107  
 180.000 .0726 .0652 -.3122

ALPHAT ( S ) = 0.100 BETAT ( S ) = 0.420

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE CP

W/LT .0030 .0060 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5590 .6360

PHI  
 .000 1.0640 1.0370 .6962 .2111 -.1773 -.2357 -.3529 -.2193 .0932 .0214 -.0761 -.1422 -.1328 -.0920 .0146  
 30.000 .5268 .0447 -.3063 -.3841 -.4639 -.3795 .1409 .0977 -.1185 -.1919 -.1921 -.1086 -.0160  
 60.000 .3801 -.0987 -.4184 -.4827 -.2422 -.1114 .2063 .0677 -.1679 -.1896 -.1332 -.0028 .0056  
 90.000 .6823 .2080 -.1698 -.1740 .5211 -.1368 -.1935 .4895 .4805 -.1807 -.0416 -.0506 -.1075  
 120.000 .2549 -.2340 -.4815 -.5328 -.1339 -.1064 -.0484 -.0498 -.3914 -.0905 -.0498 -.1014 -.0966  
 135.000 .2612 -.2045 -.4841 -.5117 -.1384 -.1119 -.0166 .0853 .0830 .1023 .1356 .1436 .1355 .1355  
 150.000 .1884 -.4761 .5319 .1467 .1101 .0135 .0221 .0221 .0221 .0221 .0221 .0221 .0221 .0221  
 165.000 .3100 .1677 .4689 .2261 .1467 .1092 .4210 .4210 .4210 .4210 .4210 .4210 .4210 .4210  
 180.000 .6833 .3100 .1677 .4689 .2261 .1467 .1092 .4210 .4210 .4210 .4210 .4210 .4210 .4210  
 270.000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000 .1000

W/LT .7400 .0530 .9260

PHI  
 .000 -.0374 .0716 -.0156  
 30.000 -.0604 .0790 -.0215  
 60.000 -.0165 .1368 .0805  
 90.000 .0223 .1157  
 120.000 .0431 .0847 .0875  
 135.000 .0318 .0829 .1696  
 150.000 .0295 .0820 .1858  
 165.000 .0306 .0474 .2307  
 180.000 .0974 .0185 .3905

ARC11-716 1414 0712-512825 EXTERNAL TANK (R01748) ( 14 FEB 74 )

## REFERENCE DATA

WATER = 2.4810 30.07. WMR = 29.8800 INCHES  
 LWR = 30.7090 INCHES WMR = .0000 INCHES  
 WLR = 30.7390 INCHES WMR = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT ( 1 ) = -0.680 BETAT ( 1 ) = -0.280

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/L	.0000	.0500	.0400	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5380	.6380
PMI	.000	1.1100	.7250	.3485	-.1026	-.3971	-.4329	-.1934	-.0939	.0300	-.1688	-.2875	-.1087	-.0607	-.0495
30.000				.4301	-.0349	-.3472	-.4146	-.4843	-.0492	-.0491	-.2423	-.3636	-.1734	-.1572	-.1478
60.000				.5732	.0927	-.2423	-.3097	-.3981	.0169	-.0361	-.5214	-.0210	-.3188	.0361	-.0406
90.000		1.1000		.7351	.2530	-.1229	-.1967	-.1964	.3945	.4655	-.4284	-.4060	-.1527	-.0734	-.0477
120.000				.8605	.3574	-.0394	-.1191	-.1493	.4252	.5135	.0301	.2308	.2344	.1139	.0028
150.000								.3464	.3464	.3222	.2212			-.0019	
180.000				.8610	.3725	-.0224	-.0991	-.2180	.4043	.4969	.3972	.2581	-.0042	-.1379	-.1373
165.000					.3339	-.0561	-.1359	-.2357	.3608	.5130	.3927	.1878	-.0083	-.1659	-.1706
180.000	1.1100	1.1000	.7222	.2761	-.1003	-.1772	-.2509	.1360	.3377	.4953	.3293	.0999	-.0485	-.2020	-.2211
270.000		.7313													.4695

W/L = .7460 .5330 .9280

PMI  
 .000 -0.0532 .0316 -.0434  
 30.000 -0.0793 -.0119 .0003  
 60.000 -0.0392 -.0136 .0487  
 90.000 .0099 -.1497  
 120.000 .0740 -.0392 .1964  
 150.000 .0764 -.0100 .1154  
 180.000 .0407 -.0597 .1574  
 165.000 .0284 -.0337 -.0823  
 180.000 -0.0182 -.0332 -.1146

ALPHAT ( 1 ) = -0.680 BETAT ( 2 ) = -4.120

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

W/L	.0000	.0500	.0400	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5380	.6380
PMI	.000	1.1333	.7631	.3677	-.0975	-.3870	-.4383	-.3291	-.0800	.0500	-.1130	-.3045	-.1407	-.0043	-.3973
30.000				.4108	-.0323	-.3646	-.4250	-.4654	-.0740	.0110	-.1320	-.3013	-.1695	-.1076	-.0794
60.000				.5040	.0257	-.2997	-.3621	-.4512	-.0773	.0238	-.4042	-.5921	-.2723	-.1616	-.0307
90.000		1.0180		.6336	.1526	-.2067	-.2779	-.3669	.2533	.4536	-.4103	-.4330	-.1247	-.0671	-.0688
120.000				.7481	.2652	-.1186	-.1955	-.2684	.2632	.5343	.1454	.2350	.1633	.0426	-.1412
150.000								.2272	.3577	.3577	.1543			-.0791	
180.000				.8082	.3147	-.0734	-.1516	-.2651	.1807	.4989	.2278	.1764	-.0810	-.2078	-.2182

## PARAMETRIC DATA

WATER = 1.100 ELEVON = .000  
 RUDDER = .000 SPOON = .000



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(R81748)

ARC11-716 1A14 3A+T12+S12M25

EXTERNAL TANK

ALPHAT (1) = -0.680 BETAT (2) = -4.120

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PMI															
165.000				.3131	-.0756	-.1563	-.2532	.0997	.4064	.5364	.3405	.1319	-.0733	-.1078	-.2117
180.000	1.1580	1.1770	.7847	.2858	-.3966	-.1715	-.2620	.0967	.3892	.5330	.3498	.0891	-.0752	-.1908	-.2218
270.000		.8276							.4747						

K/LT .7400 .8530 .9280

PMI

.000	-.0403	.0515	-.0554
30.000	-.0590	.0201	.0012
60.000	-.0353	.0151	.0665
90.000	.0011	.0212	
120.000	.0196	-.0604	.0719
155.000	.0091	-.0554	-.0037
190.000	-.0207	-.1029	.0340
165.000	-.0046	-.0571	-.1680
180.000	-.0390	-.0569	-.1559

ALPHAT (1) = -0.680 BETAT (3) = .020

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6360
PMI															
.000	1.1710	.7780	.3705	-.0908	-.3611	-.4375	-.4349	-.0910	.0531	.1022	-.0693	-.2971	-.0356	.0148	-.0178
30.000			.3843	-.0756	-.3742	-.4331	-.4922	-.0848	.0154	-.0254	-.2457	-.1940	-.0635	-.0444	-.0903
60.000			.4367	-.0378	-.3487	-.4050	-.4438	-.1187	.0816	-.1937	-.5636	-.2246	-.1790	-.0478	-.0349
90.000		.9271	.5321	.0513	-.2857	-.3497	-.1339	.0417	.4778	-.4074	-.4632	-.1275	-.0804	-.0825	
120.000			.6458	.1643	-.1996	-.2756	-.3594	.1488	.5504	.2279	.1811	.0955	-.0093	-.1181	-.2081
155.000								.1553		.7777	.0827			-.1718	
190.000			.7582	.2448	-.1342	-.2088	-.3157	.1225	.4436	.918	.1428	-.0267	-.1618	-.3026	-.2973
165.000				.2831	-.1025	-.1802	-.2771	-.0030	.4200	.5395	.2666	.0989	-.0268	-.1084	-.1832
180.000	1.1710	1.1780	.7868	.2891	-.0975	-.1722	-.2683	.0034	.4188	.5255	.3620	.0328	-.0433	-.1969	-.2040
270.000		.9239													

K/LT .7400 .8530 .9280

PMI

.000	-.0476	.0578	-.0723
30.000	-.0646	.0535	-.0236
60.000	-.0363	.0574	.1326
90.000	-.0181	.0242	
120.000	-.0046	-.0458	-.0895
155.000	-.0230	-.0537	-.1569
180.000	-.0450	-.1359	-.1589

ORIGINAL PAGE IS  
OF POOR QUALITY

(001740)

EXTERNAL TANK

ARC11-716 T-1414 Q-112-S12MS

ALPHAT ( 1 ) = -0.610 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

W/LT .7400 .0530 .9280

PMI

165.000 -.0175 -.0611 -.2116  
100.000 -.0113 -.0632 -.1817

ALPHAT ( 1 ) = -0.630 BETAT ( 4 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CF

W/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5500	.6300
PMI															
.0000	1.1330	.7619	.3718	-.0913	-.3843	-.4397	-.3068	-.0804	.0364	.0752	-.1147	-.2983	-.0633	-.0044	-.0245
30.000			.3565	-.1020	-.3685	-.4453	-.2491	-.0746	.0104	-.0237	-.2077	-.2592	-.0622	-.0294	-.0580
60.000			.3713	-.0900	-.3757	-.4326	-.1410	-.1007	.0123	-.1798	-.5584	-.2027	-.1423	-.0974	-.0612
90.000		.8256	.4287	-.0366	-.3429	-.4033	-.0445	-.0705	.5296	-.4122	-.4836	-.1564	-.0992	-.1503	
120.000			.5348	.0630	-.2695	-.3412	-.3266	.0574	.5590	.2885	.1245	.0321	-.0529	-.1666	-.2470
135.000								.0750	.3758	.3758	.0008			-.2269	
150.000			.6480	.1701	-.1691	-.2634	-.3634	.0522	.4095	.4550	.0071	-.1636	-.2486	-.3944	-.3270
165.000				.2405	-.1296	-.2072	-.3037	-.0060	.3754	.4920	.2574	.0602	-.0294	-.1409	-.2135
180.000	1.1330	1.1700	.7760	.2824	-.0932	-.1737	-.2677	.0674	.3656	.4916	.3614	.0349	-.0469	-.2042	-.2620
270.000		1.0170							.4437						

W/LT .7400 .0530 .9280

PMI

.0000	-.0453	.0464	-.0532
30.000	-.0521	.0477	-.0553
60.000	-.0225	.0672	-.1201
90.000	-.0671	-.0412	
120.000	-.0671	-.0668	-.1721
135.000	-.0918	-.0829	-.2410
150.000	-.1083	-.1716	-.2576
165.000	-.0758	-.0321	-.2617
180.000	-.0688	-.1045	-.3351



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4967

ARC11-71.6 IA14 Q1+T12+S12N25

(RB1748)

EXTERNAL TANK

ALPHAT ( 1 ) = -0.680 BETAT ( 5 ) = 0.330

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C=

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PMI	.000	1.1010	.7140	.3362	-.1074	-.3555	-.4097	-.1325	-.0943	.0161	.0397	-.1745	-.2725	-.1134	-.0582
30.000				.3085	-.1444	-.3658	-.4147	-.0987	-.0805	.0086	-.1302	-.2467	-.3141	-.1147	-.0595
60.000				.3033	-.1448	-.3639	-.4020	-.1020	-.0977	-.1116	-.1262	-.3575	-.2000	-.1013	-.0898
90.000			.7273	.3373	-.1076	-.3534	-.3296	-.0672	-.1800	.5890	4157	-.5004	-.1761	-.1090	-.1710
120.000				.4339	-.0256	-.2988	-.3628	-.2565	-.0297	.5633	.3171	.1012	-.0085	-.1094	-.2298
135.000								-.0022	-.0022	.3461	-.0514	-.3017			
150.000				.5613	.0901	-.2179	-.2820	-.4189	-.0310	.3571	.3731	-.0534	-.2425	-.3841	-.4891
165.000					.2083	-.1376	-.2079	-.3383	-.0452	.2919	.4081	.2186	.0511	-.0433	-.2303
180.000		1.1010	1.0920	.7548	.2764	-.0619	-.1550	-.2796	.0852	.2792	.4297	.3467	.0518	-.1015	-.2612
270.000			1.0980						.4522						

X/LT .7460 .8530 .9280

PMI

.000	-.0308	.0320	-.0456
30.000	-.0478	.0507	-.0575
60.000	-.0424	.0681	.1036
90.000	-.1733	-.2223	
120.000	-.1410	-.1153	-.2007
135.000	-.1721	-.1172	-.2654
150.000	-.1975	-.2032	-.2954
165.000	-.1643	-.1363	-.3179
180.000	-.1550	-.2022	-.4164

ALPHAT ( 2 ) = -4.490 BETAT ( 1 ) = -0.280

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C=

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
PMI	.000	1.1620	.8326	.4455	-.0308	-.3458	-.4039	-.4732	-.1159	.0498	.0223	-.1946	-.2478	-.1400	-.0573
30.000				.5394	.0611	-.2745	-.3457	-.4206	-.1997	.0524	-.1759	-.3203	-.1364	-.1476	-.1368
60.000				.6802	.1739	-.1859	-.2574	-.3579	.0939	.1267	-.4016	-.5285	-.2569	-.1072	.0410
90.000			1.1490	.7650	.2743	-.1073	-.1836	-.2811	.3676	.5360	-.5591	-.4021	-.0909	-.0345	-.0319
120.000				.8016	.3154	-.0794	-.1583	-.2533	.2493	.4171	-.0689	.2014	.2346	.1196	.0084
135.000								.1444	.1826	.1826		.2048			.0028
150.000				.7765	.2821	-.1025	-.1781	-.2856	.0590	.2992	.2862	.1742	-.0158	-.1402	-.1303
165.000					.2282	-.1491	-.2215	-.3178	-.2058	.2611	.4393	.3385	.1561	-.0061	-.1737
180.000		1.1620	1.0820	.6628	.1705	-.1852	-.2385	-.3388	-.1231	.2402	.4490	.0756	-.0491	-.2163	-.2210
270.000			.7809						.5426						

X/LT .7460 .8530 .9280

PMI



(R81748)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+S12M25

ALPHAT( 2 ) = -4.430 BETAT ( 1 ) = -8.280

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6330 .9280

PHI

.000 -.0743 .0266 -.0469  
 30.000 -.0623 .0287 -.0175  
 60.000 -.0045 .1100 .0947  
 90.000 .0932 .0890  
 120.000 .1036 .0922 .2306  
 135.000 .1101 .0933 .1643  
 150.000 .0680 .0713 .2324  
 165.000 .0613 .0875 -.0750  
 180.000 .0188 .0635 -.1018

ALPHAT( 2 ) = -4.430 BETAT ( 2 ) = -4.120

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PHI

.000 1.2110 .8715 .4679 -.0121 -.3301 -.3887 -.4600 -.0696 .0768 .0905 -.1218 -.2814 -.0693 .0218 -.0150  
 30.000 .5164 .0258 -.2987 -.3641 -.4337 -.2924 .1184 -.0575 -.2269 -.1697 -.1004 -.0525 -.0504  
 60.000 .5901 .0941 -.2479 -.3122 -.4081 .0383 .1857 -.3605 -.5077 -.1983 -.1714 .0009 .0055  
 90.000 1.0730 .6674 .1731 -.1897 -.2632 -.3541 .2214 .5429 -.5364 -.4369 -.0961 -.0331 -.0431  
 120.000 .7146 .2230 -.1535 -.2289 -.3197 .1523 .4346 .0038 .1484 .1551 .0921 -.0399 -.1246  
 135.000 .7300 .2306 -.1494 -.2200 -.3246 -.0719 .3445 .4199 .1414 .1569 -.0710 -.1846 -.1933  
 150.000 .2096 -.1607 -.2348 -.3283 -.2483 .3062 .4646 .2926 .1093 -.0757 -.1709 -.1880  
 165.000 1.2110 1.0990 .6843 .1815 -.1608 -.2320 -.3339 -.0783 .2696 .4598 .3055 .0434 -.0897 -.2027 -.2113  
 180.000 .8817 .5893

X/LT .7460 .6330 .9280

PHI

.000 -.0549 .0350 -.0431  
 30.000 -.0592 .0430 .0046  
 60.000 -.0285 .0809 .0891  
 90.000 .0312 .0908  
 120.000 .0232 .0316 .1324  
 135.000 .0280 .0255 .0736  
 150.000 -.0006 -.0140 .1350  
 165.000 .0134 .0180 -.1365  
 180.000 -.0106 .0383 -.1408



DATE 06 JAN 73

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4960

(R81740)

EXTERNAL TANK

ARC11-716 1A14 01-712-S12N25

ALPHAT ( 2 ) = -4.340 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0050	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2230	.8635	.4701	-.0007	-.3243	-.3869	-.4382	-.0635	.5392	.1174	-.0893	-.2601	-.0445	.0448	-.0004	
30.000	.4793	.0037	-.3256	-.3855	-.4484	-.0945	.0830	.0366	-.1746	-.2746	-.0480	.0122	-.0328			
60.000	.5128	.0195	-.2988	-.3600	-.4304	-.0228	.2400	-.3081	-.4825	-.1446	-.0850	-.0758	-.0265			
90.000	.9756	.5530	.3705	-.2642	-.3328	-.4157	.0883	.5574	-.5134	-.4784	-.1193	-.0641	-.0794			
120.000	.5172	.1255	-.2254	-.2956	-.3806	.1021	.4240	.0813	.0992	.0711	-.0018	-.1007	-.1829			
135.000						.1021	.2938	.2938		.0490		-.1412				
150.000						.0908	.2893	.3921	.0873	-.0603	-.1492	-.2697	-.2722			
165.000						-.0385	.2894	.4332	.2407	.0688	-.0444	-.1759	-.2022			
180.000	1.2230	1.0960	.6846	.1816	-.1815	-.2521	-.3414	-.0011	.2619	.4285	.3192	.3033	-.0328	-.1987	-.1999	
270.000	.9756															

X/LT .7460 .8530 .9280

PMI																
.000	-.0536	.0562	-.0395													
30.000	-.0681	.0533	-.0276													
60.000	-.0395	.0803	.1035													
90.000	-.0223	.0727														
120.000	.0084	.0123	-.0192													
135.000	-.0035	.0015	-.0937													
150.000	-.0327	-.0654	-.0902													
165.000	-.0084	-.0116	-.1567													
180.000	-.0104	-.0085	-.1509													

ALPHAT ( 2 ) = -4.340 BETAT ( 4 ) = 4.150

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE Cp

X/LT	.0000	.0050	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI																
.000	1.2030	.8686	.4659	-.0089	-.3220	-.3875	-.4373	-.0834	.0792	.0837	-.1201	-.2768	-.0816	.0232	-.0123	
30.000	.4583	-.0369	-.3433	-.4026	-.4652	-.0449	.0365	.0563	-.1592	-.3129	-.0539	.0102	-.0190			
60.000	.4331	-.0415	-.3420	-.3980	-.4717	-.0499	.1625	-.2353	-.4633	-.1236	-.0314	-.0533	-.0794			
90.000	.8762	.4598	-.0119	-.3216	-.3840	-.1026	.0163	.6017	-.4883	-.4971	-.1699	-.1007	-.1037			
120.000	.5140	.0359	-.2899	-.3534	-.0575	.0424	.2101	.1788	.0485	.0136	-.0468	-.1325	-.2161			
135.000						.0560		.2800		-.0250		-.2057				
150.000	.5868	.0959	-.2441	-.3114	-.4033	.0463	.2381	.3471	-.0330	-.1845	-.2344	-.3769	-.3065			
165.000	.1475	-.2078	-.2790	-.3690	.0433	.2578	.4047	.2106	.0188	-.0444	-.1222	-.2013				
180.000	1.2030	1.0920	.6749	.1750	-.2527	-.3435	-.0091	.2554	.4017	.3181	-.0908	-.0550	-.1741	-.2337		
270.000	1.0670															

X/LT .7460 .8530 .9280

PMI

(RB1748)

EXTERNAL TANK

ARC11-716 IAI14 Q1+T12+S12M25

ALPHAT ( 2 ) = -4.340 BETAT ( 4 ) = 4.150

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9290

PHI

.000 -.0572 .0320 -.0409  
 30.000 -.0339 .0500 -.0367  
 60.000 -.0414 .0633 .0874  
 90.000 -.0403 .0261  
 120.000 -.0412 -.0194 -.1271  
 135.000 -.0645 -.0334 -.2042  
 150.000 -.0734 -.1056 -.2219  
 165.000 -.0544 -.0367 -.2378  
 180.000 -.0492 -.0368 -.3266

ALPHAT ( 2 ) = -4.350 BETAT ( 5 ) = 8.270

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.1560 .8200 .4349 -.0345 -.3433 -.4040 -.4737 -.0957 .0293 -.0013 -.1948 -.2391 -.1415 -.0504 -.0840  
 30.000 .3768 -.0812 -.3735 -.4342 -.4770 -.0659 .0088 -.0463 -.2230 -.2828 -.0768 -.0111 -.0223  
 60.000 .3594 -.0971 -.3814 -.4352 -.1541 -.0758 .0917 -.1656 -.4226 -.1481 -.0608 -.0420 -.0620  
 90.000 .7772 .3714 -.0801 -.3752 -.4320 -.0720 -.0687 .4890 -.4572 -.3472 -.1796 -.1189 -.1365  
 120.000 .4246 -.0379 -.3498 -.4114 -.0205 -.0111 .1071 .1738 .0412 -.0361 -.1269 -.2279 -.2505  
 135.000 .5063 .0286 -.2955 -.3626 -.2165 -.0258 .3037 -.0873 -.0487 -.2673 -.3823 -.4782 -.3056  
 165.000 .1022 -.2401 -.3109 -.4025 -.0013 .1875 .3030 .3309 .1649 -.0001 -.0702 -.2427 -.2917  
 180.000 .6537 .1609 -.1944 -.2665 -.3576 -.0538 .1927 .3420 .2966 .0144 -.1118 -.2781 -.3296  
 270.000 1.1490 .5271

X/LT .7400 .8530 .9280

PHI

.000 -.0743 .0244 -.0533  
 30.000 -.0534 .0563 -.0419  
 60.000 -.0627 .0630 .0764  
 90.000 -.1159 -.0670  
 120.000 -.0902 -.0508 -.1733  
 135.000 -.1176 -.0499 -.2318  
 150.000 -.1354 -.1331 -.2522  
 165.000 -.1180 -.0674 -.2837  
 180.000 -.1191 -.1004 -.3742



ARC11-716 1A14 Q4+T12+S12M25 (RB1748)

ALPHAT ( 3 ) = -.640 BETAT ( 1 ) = -.8320

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PW1																
.000	1.1770	.9190	.5343	.0486	-.2831	-.3422	-.4232	-.3788	.0961	.0447	-.1563	-.1879	-.1787	-.0824	-.0675	
30.000			.6354	.1511	-.2058	-.2780	-.3587	-.1851	.1042	-.0961	-.2552	-.1096	-.1020	-.1242	-.0769	
60.000			.7307	.2406	-.1323	-.2049	-.3104	.1534	.2484	-.2969	-.3409	-.1394	-.1345	.0119	.0002	
90.000		1.1650	.7782	.2836	-.0974	-.1758	-.2729	.3720	.5584	-.5206	-.4195	-.1691	-.0925	-.0179		
120.000			.7523	.2651	-.1188	-.1958	-.2874	.1685	.3129	-.2014	-.1116	.2521	.1788	.0493	-.0211	
135.000								.0368		.0022		.1616		.0284		
150.000			.6889	.2017	-.1680	-.2404	-.3448	-.0678	.1922	.2918	.2337	.1102	.0795	-.1100	-.0839	
165.000				.1321	-.2220	-.2887	-.3773	-.2920	.1682	.3822	.2757	.1354	.334	-.1441	-.1093	
180.000	1.1770	1.0020	.5681	.0791	-.2554	-.3202	-.3940	-.0806	.1571	.3706	.2359	.0430	-.0371	-.1912	-.1626	
270.000		.7922							.6765							

X/LT .7480 .8530 .9280

PW1																
.000	-.0544	.0266	-.0546													
30.000	-.0321	.0744	-.0241													
60.000	.0207	.1708	.1010													
90.000	.0905	.1623														
120.000	.0817	.2336	.2638													
135.000	.0938	.2197	.1890													
150.000	.0715	.1710	.2564													
165.000	.0791	.1747	-.0515													
180.000	.0487	.1284	-.0935													

ALPHAT ( 3 ) = -.620 BETAT ( 2 ) = -.4140

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PW1																
.000	1.2290	.9629	.5586	.0373	-.2675	-.3344	-.4123	-.3652	.1399	.1167	-.0997	-.2271	-.1220	.0195	.0011	
30.000			.8042	.1060	-.2364	-.3080	-.3857	-.3227	.1518	.0110	-.1803	-.1614	-.0684	-.0225	-.0285	
60.000			.6551	.1530	-.2034	-.2701	-.3685	.0467	.2908	-.2499	-.3732	-.1073	-.0906	-.0687	.0129	
90.000		1.0850	.6766	.1793	-.1871	-.2581	-.3465	.2304	.5721	-.5152	-.4914	-.1681	-.0617	-.0203		
120.000			.6671	.1778	-.1932	-.2642	-.3483	.0825	.3659	-.1334	-.1144	.1339	.1043	.0017	-.0809	
135.000								-.0229		.1291		.0479		-.0228		
150.000			.6463	.1443	-.2124	-.2805	-.3766	-.1308	.2415	.3452	.0884	.0608	.0003	-.1454	-.1413	
165.000				.1147	-.2359	-.3050	-.3902	-.1948	.2133	.3839	.2419	.0355	-.0290	-.1424	-.1301	
180.000	1.2290	1.0150	.5892	.0844	-.2494	-.3193	-.3964	-.0416	.1932	.3602	.2613	-.0212	-.0357	-.1688	-.1725	
270.000		.8978							.6223							

X/LT .7480 .8530 .9280

PW1

ORIGINAL PAGE IS  
OF POOR QUALITY

(RB1748)

EXTERNAL TANK

ARC11-716 1A14 ON-T12-S12N25

ALPHAT ( 3 ) = -.020 BETAT ( 2 ) = -4.140

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000 -.0503 .0313 -.0301  
 30.000 -.0525 -.0525 -.0033  
 60.000 -.0136 .1167 .0790  
 90.000 .0349 .1379  
 120.000 .0213 .1458 .1914  
 135.000 .0262 .1296 .1220  
 150.000 .0099 .0922 .1973  
 165.000 .0291 .1086 -.1157  
 180.000 .0119 .0862 -.1230

ALPHAT ( 3 ) = -.610 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6360

PHI

.000 1.2430 .9778 .5636 .0613 -.2664 -.3337 -.4122 -.3610 .1429 .1382 -.0736 -.2095 -.0903 .0399 .0173  
 30.000 .5657 .0585 -.2672 -.3378 -.4076 -.3044 .1234 .0945 -.1396 -.2316 -.0493 .0200 .0014  
 60.000 .5671 .0616 -.2629 -.3284 -.4175 .0515 .3479 -.1936 -.3372 -.1363 -.0017 .0030 -.0101  
 90.000 .9930 .3731 .0728 -.2605 -.3256 -.4076 .0976 .5904 -.5529 -.3253 -.0998 -.0741 -.0601  
 120.000 .5811 .0795 -.2572 -.3240 -.4026 .0329 .3969 -.0592 -.0900 .0744 .0418 -.0627 -.1470  
 135.000 .5930 .0871 -.2518 -.3190 -.4084 .0397 .1874 .3383 .0082 -.0541 -.0817 -.2117 -.2292  
 150.000 .5899 -.2476 -.3171 -.3989 .0362 .2025 .3314 .2028 .0046 -.0168 -.1404 -.1673  
 165.000 1.2430 1.0130 .5956 .0849 -.2494 -.3168 -.3976 -.0115 .1902 .2696 -.0248 -.1098 -.1895  
 180.000 .9979 .5920

X/LT .7460 .8530 .9280

PHI

.000 -.0469 .0351 -.0101  
 30.000 -.0310 .0470 .0025  
 60.000 -.0431 .0877 .0611  
 90.000 -.0153 .1098  
 120.000 .0192 .0854 .0646  
 135.000 .0100 .0769 -.0239  
 150.000 -.0194 .0218 -.0215  
 165.000 .0072 .0600 -.1378  
 180.000 .0116 .0635 -.1423



TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01T40)

## EXTERNAL TANK

ARC11-716 1A14 01+T12+S12N25

$$\text{BETAT}(4) = -0.610$$

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

[illegible]

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388</
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[illegible]
$$\Delta \text{BET}(\beta) = -.620 \quad \text{BET}(\beta) = 0.295$$

**SECTION ( 1 ) EXTERNAL TANK**

DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
FMI															
.000	1.1720	.9259	.5225	.0488	-.2879	-.3520	-.4333	- .3790	.0815	.0233	-.1640	-.1918	-.1988	-.0903	-.0670
30.000			.4332	-.0318	-.3466	-.4097	-.4717	-.0452	.0673	-.0411	-.2090	-.2864	-.1096	-.0192	-.0176
60.000			.3936	-.0659	-.3698	-.4228	-.4839	- .0689	.1382	-.0728	-.2859	-.1763	- .0809	-.0342	-.0284
90.000		.7894	.3768	-.0842	-.3750	-.4304	-.1339	-.0644	.6647	-.4777	-.0807	-.0041	-.0804	-.1396	
120.000			.3961	-.0580	-.3652	-.4225	-.0786	-.0435	.0506	.1032	-.1031	-.0644	-.0947	-.1889	-.2223
155.000							-.0279			.0938		-.1256		-.2334	
190.000			.4496	-.0249	-.3399	-.3979	-.0627	-.0203	.1209	.2723	-.0971	-.2917	-.2844	-.3917	-.2829
165.000			.0234	-.3019	-.3653	-.4387	-.0180		.1511	.2645	.1146	-.0591	-.0758	-.2130	-.2370
140.000	1.1720	.9202	.5630	.0731	-.2666	-.3332	-.4177	.0144	.1365	.2699	.2322	-.0356	-.0917	-.2787	-.2677
70.000		1.1690							.5590						

1947	.7460	.8530	.9280
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(R01748)

EXTERNAL TANK

ARC11-7:6 IA14 OL+Y12+S12M25

ALPHAT( 3) = -.0820 BETAT( 3) = 8.290

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8330 .9280

PHI

.000 -.0884 .0212 -.0809  
 30.000 -.0901 .0478 -.0392  
 60.000 -.0814 .0707 .1004  
 90.000 -.1134 .0123  
 120.000 -.0553 .0069 -.1145  
 135.000 -.0792 .0074 -.1863  
 150.000 -.0870 -.0513 -.2009  
 165.000 -.0752 -.0248 -.2491  
 180.000 -.0874 -.0434 -.3719

ALPHAT( 4) = 4.080 BETAT( 4) = -8.450

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3448 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.1630 1.0110 .6433 .1559 -.2010 -.2745 -.3567 -.3114 .1406 .0619 -.0879 -.1467 -.1346 -.0832 -.0519  
 30.000 .7510 .2589 -.1182 -.1971 -.2832 -.1296 .1714 -.0137 -.0980 -.1081 -.0574 -.0425 -.0344  
 60.000 .8029 .3104 .0755 -.1508 -.2614 .2315 .3646 -.1749 -.1905 -.1033 .0377 .0435 .0196  
 90.000 1.1510 .7727 .2826 -.1020 -.1766 -.2769 .3528 .5270 .3643 .2270 .1352 .1689 -.0867  
 120.000 .6726 .1890 .1770 .2502 .3409 .0770 .1582 .4193 .2195 .2439 .1620 .0602  
 135.000 .5775 .0926 .2511 .3174 .4167 .1296 .0760 .2192 .0883 .1301 .0938 .0355 .0366  
 165.000 .0222 .3081 .3694 .4521 .1471 .0703 .3093 .1861 .0174 .0202 .0384 .0383  
 180.000 1.1630 .6902 .4572 .0223 .3309 .3926 .4620 .0802 .1001 .2937 .1849 .0228 .1118 .1017  
 270.000 .7751 .6800

X/LT .7480 .8330 .9280

PHI

.000 -.0335 .0172 -.0766  
 30.000 .0082 .1001 -.0345  
 60.000 .0482 .1781 .0693  
 90.000 .0498 .0741  
 120.000 .1378 .3175 .2997  
 135.000 .1469 .3036 .2238  
 150.000 .1204 .2255 .3068  
 165.000 .1295 .2167 .0365  
 180.000 .0949 .1631 .0946

DATE 06 JAN 73

TABULATED PRESSURE DATA - 11144 - VOL. 9

PAGE 4873

(R01748)

EXTERNAL TANK

ARC11-716 1A14 D-712+52425

ALPHAT ( 4 ) = 4.090 BETAT ( 2 ) = -4.190

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT	.0000	.0080	.0490	.1130	.1750	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
.000	1.2190	1.0690	.6733	.1732	-.1691	-.2578	-.3445	-.2979	.2047	.1336	-.0423	-.1468	-.1099	-.0077	.0310
30.000			.7112	.2115	-.1580	-.2335	-.3172	-.2703	.2271	.0873	-.0833	-.1325	-.0856	.0130	.0342
60.000			.7129	.2128	-.1558	-.2255	-.3297	.0901	.3904	-.1216	-.1837	-.1519	.0119	.0421	.0399
90.000		1.0700	.6712	.1742	-.1882	-.2614	-.3521	.2085	.5417	-.4287	-.2412	.0391	-.0223	-.0219	
120.000			.5960	.0662	-.2423	-.3112	-.3929	.0150	.2302	-.2778	-.3686	-.1943	.1260	.0971	-.0084
135.000								-.0467		-.0360		-.1820		.0651	
150.000			.5401	.0460	-.2832	-.3478	-.4398	-.0537	.1290	.2809	.0941	-.1766	.0067	-.0471	-.0782
165.000			.0111	-.3101	-.3717	-.4534	-.0366	.0966	.2908	.1949	.0051	-.0080	-.0091	-.0675	
180.000	1.2190	.9044	.4755	-.0108	-.3204	-.3846	-.4084	-.0243	.0912	.2346	.2312	-.0348	-.0774	.0036	-.0729
270.000		.6854							.5969						

X/LT .7460 .6130 .9280

PHI

.000	-.0189	.0270	.0323												
30.000	-.0047	.0659	.0340												
60.000	.0130	.1270	.0966												
90.000	.0137	.1447													
120.000	.0564	.2321	.1859												
135.000	.0717	.2179	.1186												
150.000	.0614	.1592	.1961												
165.000	.0609	.1677	-.0987												
180.000	.0640	.1362	-.1163												

ALPHAT ( 4 ) = 4.120 BETAT ( 3 ) = .000

SECTION ( 1 ) INTERNAL TANK DEPENDENT VARIABLE C<sub>P</sub>

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6300
PHI															
.000	1.2340	1.0780	.6746	.1781	-.1868	-.2591	-.3474	-.2956	.2164	.1780	-.0286	-.1321	-.0782	.0239	.0439
30.000			.6431	.1810	-.1993	-.2735	-.3539	-.3032	.1990	.1398	-.0996	-.1371	-.0986	.0208	.0340
60.000			.6233	.1186	-.2278	-.2977	-.3898	.0485	.3587	-.0668	-.1747	-.0880	-.0134	.0174	.0174
90.000		.9808	.5665	.0720	-.2507	-.3324	-.4114	.0768	.5803	-.4937	-.2070	-.0248	-.0631	-.0331	
120.000			.5196	.0316	-.2937	-.3609	-.4359	.0038	.2902	-.2243	-.3434	-.1045	.0706	.0074	-.0731
135.000								-.0037		.0407		-.2064		-.0148	
150.000			.4982	.0134	-.3168	-.3754	-.4557	-.0270	.0920	.2626	.0306	-.1658	-.0200	-.1130	-.1513
165.000			.0100	-.3289	-.3927	-.4700	-.0251	.0958	.2410	.2035	-.0323	.0031	-.0314	-.0843	
180.000	1.2340	.9030	.4859	.0079	-.3188	-.3960	-.4164	-.0135	.1032	.2381	.2390	-.0351	-.0136	-.0334	-.0841
270.000		.9799							.5636						

X/LT .7460 .6130 .9280



(RB1748)

EXTERNAL TANK

ARC11-716 IAI4 QI+T12+312M25

ALPHAT( 4) = 4.120 BETAT ( 3) = .000

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI

.000 -.0085 .0113 .0262  
 30.000 -.0131 .0355 .0256  
 60.000 -.0133 .0907 .0997  
 90.000 -.0023 .1106  
 120.000 .0475 .1553 .0777  
 135.000 .0410 .1463 -.0025  
 150.000 .0157 .0946 .0258  
 165.000 .0474 .1290 -.1332  
 180.000 .0513 .1212 -.1436

ALPHAT( 4) = 4.110 BETAT ( 4) = 4.170

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2130 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6380

PHI

.000 1.2180 1.0600 .6628 .1881 -.1895 -.2610 -.3453 -.2993 .2015 .1446 -.0447 -.1457 -.1197 -.0026 .0351  
 30.000 .5695 .0991 -.2410 -.3149 -.3679 -.2433 .1758 .1403 .1403 -.1081 -.1549 -.0900 -.0032 .0224  
 60.000 .5197 .0304 -.2880 -.3503 -.4367 .0184 .2155 .0077 -.2028 -.0370 -.0449 -.0132 -.0056  
 90.000 .8647 .4682 -.0044 -.3206 -.3833 .4601 -.0110 .8073 .5320 .0807 .1068 .1067 .0566  
 120.000 .4396 -.0300 -.3411 -.3997 .4677 -.0278 .2905 .1378 .2798 .0182 .0090 .0624 .1132  
 135.000 .4496 .0355 .3441 .3977 .4382 .0410 .0706 .2515 .0119 .2342 .0913 .2016 .2186  
 150.000 .0164 .3369 .3953 .4205 .0243 .0986 .2549 .1217 .1026 .0311 .0365 .0892  
 165.000 1.2180 .9062 .4762 .0114 .3260 .3859 .4604 .1228 .2478 .2193 .0964 .0114 .0443 .1158  
 180.000 1.0790 .5457

X/LT .7480 .8530 .9280

PHI

.000 -.0181 .0253 .0392  
 30.000 -.0216 .0598 .0213  
 60.000 -.0304 .0849 .0721  
 90.000 .0069 .1048  
 120.000 .0248 .0856 -.0325  
 135.000 .0095 .0719 .1284  
 150.000 .0018 .0078 .1329  
 165.000 .0110 .0624 .1834  
 180.000 .0147 .0685 .2787



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4877

(RB1748)

ARC11-71.6 1A14 OL+712-512M25

EXTERNAL TANK

ALPHAT(4) = 4.110 BETAT(5) = 0.360

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
RNI	.000	1.1640	1.0150	.6406	.1807	-.1993	-.2717	-.3599	-.3109	.1290	.0503	-.0849	-.1538	-.1666	-.0817
30.000				.5121	.0380	-.2903	-.3575	-.4299	-.0798	.1497	.1210	-.1143	-.1743	-.1279	-.0431
60.000				.4197	-.0450	-.3537	-.4086	-.1778	-.0484	.0456	.0880	-.1866	-.0865	-.1007	-.0342
90.000		.7790		.3728	-.0794	-.3770	-.4293	-.1447	-.0673	.6380		-.4576	-.0187	-.0940	-.1164
120.000				.3619	-.0901	-.3633	-.4369	-.1569	-.0658	.1508	-.0603	-.2571	-.0801	-.0785	-.1368
135.000										.1406		-.1877		-.1580	
150.000				.3834	-.0818	-.3755	-.4290	-.1022	-.0628	.0238	.1545	-.1058	-.3499	-.1836	-.2755
165.000					-.0566	-.3637	-.4201	-.1716	-.0517	.1044	.2098	.0909	-.1263	-.0734	-.1880
180.000	1.1640	.8261		.4574	-.0278	-.3413	-.4022	-.4749	-.0314	.0919	.2223	.1824	-.1221	-.0552	-.2049
270.000		1.1580							.5394						-.2085

K/LT .7480 .8530 .9280

RNI

.000	-.0246	.0123	-.0485
30.000	-.0068	.0342	-.0175
60.000	-.0170	.0717	.0628
90.000	-.0105	.0821	
120.000	-.0044	.0548	-.0632
135.000	-.0284	.0474	-.1573
150.000	-.0534	-.0326	-.1931
165.000	-.0302	.0094	-.2258
180.000	-.0479	-.0934	-.3683

ALPHAT(5) = 0.250 BETAT(1) = -4.150

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5580	.6380
RNI	.000	1.1690	1.1470	.7762	.2788	-.1036	-.1801	-.2731	-.2237	.2497	.1900	.0131	-.0476	-.0414	-.0196
30.000				.8029	.3077	-.0803	-.1624	-.2519	-.2032	.2978	.1495	-.0490	-.0084	-.0056	.0173
60.000				.7504	.2589	-.1192	-.1936	-.2981	.1559	.4588	-.0226	-.0853	.0209	.0291	.0313
90.000		1.0190		.6391	.1600	-.2033	-.2753	-.3675	.2044	.4629		.3771	-.1329	-.0122	.0032
120.000				.5121	.0393	-.2980	-.3608	-.4416	-.0405	.0844	-.1561	-.3637	-.2416	.0355	.1062
135.000										-.0638		-.2595		.0749	
150.000				.4356	-.0387	-.3516	-.4104	-.4017	-.0587	.0501	.2176	-.0223	-.2416	.0074	-.0229
165.000					-.0683	-.3774	-.4320	-.0966	-.0756	.0434	.1933	.1316	-.0274	.0130	.0030
180.000	1.1690	.7929		.3755	-.0945	-.3806	-.4375	-.0709	-.0565	.0445	.1799	.1905	-.0446	-.0187	-.0130
270.000		.8359							.5200						-.0395

K/LT .7460 .8530 .9280

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OF FOUR QUALITY

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01740)

EXTERNAL TANK

ARC11-716 1A14 Q1712-312N25

ALPHAT ( 5 ) = 0.250 BETAT ( 1 ) = -4.150

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

W/LT .7400 .6530 .9200

PHI  
 .000 .0003 .0639 .0557  
 30.000 .0306 .1100 .0492  
 60.000 .0436 .1453 .0808  
 90.000 .0574 .1506 .1930  
 120.000 .0942 .2668 .1930  
 135.000 .1114 .2547 .1254  
 150.000 .0918 .1849 .2031  
 165.000 .1122 .1943 .0947  
 180.000 .0935 .1624 .1128

ALPHAT ( 5 ) = 0.250 BETAT ( 2 ) = .010

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

W/LT .0000 .0000 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6300

PHI  
 .000 1.1000 1.1020 .7801 .2825 -.0966 -.1784 -.2687 -.2231 .2654 .2166 .0316 -.0487 .0143 .0328 .0543  
 30.000 .7392 .2466 -.1292 -.2095 -.2961 -.2497 .2852 .2852 .1926 -.0379 -.0392 .0063 .0311 .0476  
 60.000 .6454 .1568 -.2000 -.2681 -.3726 .0591 .4506 .4506 .0336 -.0940 .0141 .0292 .0400 .0273  
 90.000 .9283 .3343 .0559 -.2849 -.3480 -.4344 .0340 .4688 .4688 .3584 -.0366 .0113 -.0202 -.0184  
 120.000 .4609 .0262 -.3481 -.4078 -.4792 -.0785 .1354 .1354 -.1196 -.4229 -.1574 .0404 .0392 -.0128  
 135.000 .4015 .0620 -.3876 -.4280 -.4932 -.0646 .0422 .0422 .2603 -.0061 .2090 -.0183 -.0748 -.0780  
 150.000 .3927 .3838 -.4321 -.1527 .0942 .0489 .0489 .2259 .1894 .0996 .0009 -.0167 .0201  
 165.000 .3792 .0951 .3807 .4356 .1073 .0797 .0797 .2283 .2188 .0731 .0189 .0137 .0158  
 180.000 .9337 .7918 .3792 .3792 .3792 .3792 .3792 .3792 .3792 .3792 .3792 .3792 .3792 .3792  
 270.000 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337 .9337

W/LT .7400 .6530 .9200

PHI  
 .000 .0336 .0307 .0756  
 30.000 .0300 .0580 .0485  
 60.000 .0149 .0851 .0585  
 90.000 .0368 .0913 .1930  
 120.000 .0738 .1875 .1932  
 135.000 .0688 .1741 .0541  
 150.000 .0431 .1223 .0372  
 165.000 .0810 .1555 .1197  
 180.000 .0835 .1903 .1340

(R01740)

EXTERNAL TANK

ARC11-716 1A14 04+112+312M23

ALPHA ( 3 ) = 0.240 BETA ( 3 ) = 4.220

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0040	.0080	.0120	.0160	.0200	.0240	.0280	.0320	.0360	.0400	.0440	.0480	.0520	.0560	.0600
Wt	1.1700	1.1410	.7631	.2733	-.1037	-.1816	-.2774	-.2204	.2448	.1709	.0091	-.0497	-.0430	-.0288	.0360	.0360
30.000	.6994	.1779	-.1819	-.2377	-.3434	-.3006	.2417	.1909	-.0336	-.1026	-.0804	-.0408	.0166	.0876	.0876	.0876
60.000	.3350	.0983	-.2731	-.3366	-.4317	-.2997	.2616	.1103	-.0878	-.1067	-.0333	.0002	.0349	.0349	.0349	.0349
90.000	.4340	-.0330	-.3468	-.4066	-.3815	-.0624	.5145	.1356	-.0946	-.1726	.0293	.0020	-.0280	-.0280	-.0280	-.0280
120.000	.3741	-.0632	-.3609	-.4339	-.4563	-.0746	-.0711	.1362	-.2503	-.2447	-.0767	-.1044	-.1466	-.1466	-.1466	-.1466
150.000	.3631	-.1030	-.3914	-.4393	-.4740	-.0847	.0494	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
180.000	.3735	-.0971	-.3916	-.4393	-.4740	-.0722	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
210.000	.7936	.10310	.3735	-.0971	-.3916	-.4393	-.4740	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245
240.000	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

K/LT	.0000	.0040	.0080	.0120	.0160	.0200	.0240	.0280	.0320	.0360	.0400	.0440	.0480	.0520	.0560	.0600
Wt	1.1700	1.1410	.7631	.2733	-.1037	-.1816	-.2774	-.2204	.2448	.1709	.0091	-.0497	-.0430	-.0288	.0360	.0360
30.000	.6994	.1779	-.1819	-.2377	-.3434	-.3006	.2417	.1909	-.0336	-.1026	-.0804	-.0408	.0166	.0876	.0876	.0876
60.000	.3350	.0983	-.2731	-.3366	-.4317	-.2997	.2616	.1103	-.0878	-.1067	-.0333	.0002	.0349	.0349	.0349	.0349
90.000	.4340	-.0330	-.3468	-.4066	-.3815	-.0624	.5145	.1356	-.0946	-.1726	.0293	.0020	-.0280	-.0280	-.0280	-.0280
120.000	.3741	-.0632	-.3609	-.4339	-.4563	-.0746	-.0711	.1362	-.2503	-.2447	-.0767	-.1044	-.1466	-.1466	-.1466	-.1466
150.000	.3631	-.1030	-.3914	-.4393	-.4740	-.0847	.0494	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
180.000	.3735	-.0971	-.3916	-.4393	-.4740	-.0722	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
210.000	.7936	.10310	.3735	-.0971	-.3916	-.4393	-.4740	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245
240.000	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333

ALPHA ( 4 ) = 0.180 BETA ( 4 ) = 0.410

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

K/LT	.0000	.0040	.0080	.0120	.0160	.0200	.0240	.0280	.0320	.0360	.0400	.0440	.0480	.0520	.0560	.0600
Wt	1.1700	1.1410	.7631	.2733	-.1037	-.1816	-.2774	-.2204	.2448	.1709	.0091	-.0497	-.0430	-.0288	.0360	.0360
30.000	.6994	.1779	-.1819	-.2377	-.3434	-.3006	.2417	.1909	-.0336	-.1026	-.0804	-.0408	.0166	.0876	.0876	.0876
60.000	.3350	.0983	-.2731	-.3366	-.4317	-.2997	.2616	.1103	-.0878	-.1067	-.0333	.0002	.0349	.0349	.0349	.0349
90.000	.4340	-.0330	-.3468	-.4066	-.3815	-.0624	.5145	.1356	-.0946	-.1726	.0293	.0020	-.0280	-.0280	-.0280	-.0280
120.000	.3741	-.0632	-.3609	-.4339	-.4563	-.0746	-.0711	.1362	-.2503	-.2447	-.0767	-.1044	-.1466	-.1466	-.1466	-.1466
150.000	.3631	-.1030	-.3914	-.4393	-.4740	-.0847	.0494	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
180.000	.3735	-.0971	-.3916	-.4393	-.4740	-.0722	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245	-.0245
210.000	.7936	.10310	.3735	-.0971	-.3916	-.4393	-.4740	.0517	.2246	.1349	-.1280	-.0431	-.0127	-.0245	-.0245	-.0245
240.000	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333	.9280	.8333

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

DATE 06 JUN 79 TABULATED MEASURE DATA - IAI4A - VOL. 9

(081740)

EXTERNAL TANK

ARC11-71.6 IAI4A 01+718+312+25

ALPHA( 3) = 0.100 BETA( 4) = 0.410

SECTION ( 1) EXTERNAL TANK DEPENDENT VARIABLE C<sub>1</sub>

W/T	.7400	.8330	.9200
Wt			
.000	-.0163	.0333	.0030
30.000	.0023	.0280	.0131
60.000	.0433	.0601	.1175
90.000	-.0140	.1016	
120.000	.0376	.0644	-.0483
150.000	.0180	.0955	-.1340
180.000	-.0116	.0121	-.1556
210.000	.0214	.0454	-.1920
240.000	-.0010	.0184	-.3483



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

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ARC11-716 IAI4 Q1+T12+S12N25 (R81749) ( 14 FEB 74 )

## REFERENCE DATA

XREF = 2.4210 30 FT. XMRP = 29.5000 INCHES  
 LREF = 36.7090 INCHES YMRP = .0000 INCHES  
 QREF = 36.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT ( 1 ) = -8.570 BETAT ( 1 ) = -9.230

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PMI	.000	1.1310	.7461	.3654	-.0801	-.3669	-.4189	-.4800	-.1064	-.0039	.0576	-.1403	-.2742	-.0929	-.0233	-.0201
30.000				.4497	-.0055	-.3132	-.3762	-.4480	-.3355	-.0612	-.2302	-.3598	-.1780	-.1322	-.1176	-.0363
60.000				.5950	.1269	-.2068	-.2719	-.3665	-.0232	-.0265	-.5039	-.5949	-.3453	-.1576	.0349	.0088
90.000			1.1270	.7597	.2837	-.0842	-.1579	-.2536	.3413	.4892	-.4587	-.3425	-.2071	-.0617	-.0028	
120.000				.8658	.3846	-.0035	-.0818	-.1757	.2868	.5153	.0963	.3258	.2681	.1495	.0389	-.0457
135.000									-.0220		.3269	.2534			.0401	
150.000				.8832	.3965	.0076	-.0667	-.1787	-.0895	.3981	.5040	.3915	.2421	.0325	-.0955	-.1135
165.000					.3559	-.0276	-.1034	-.2000	-.1484	.3416	.5261	.4123	.2176	.0302	-.1221	-.1504
180.000		1.1310	1.1830	.7772	.2959	-.0681	-.1454	-.2271	-.1755	.2965	.5096	.3511	.1467	-.0269	-.1402	-.1802
270.000			.7467						.5450							

X/LT .7460 .8550 .9280

## PMI

.000	-.0356	-.0283	-.0248
30.000	-.0832	-.0417	.0249
60.000	-.0372	-.0325	.0735
90.000	-.0175	-.0886	
120.000	-.0297	.0082	.2212
135.000	.0167	.0263	.1482
150.000	.0029	-.0260	.1934
165.000	-.0138	.0022	-.0456
180.000	-.0207	-.0063	-.0779

ALPHAT ( 1 ) = -8.550 BETAT ( 2 ) = -4.090

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380	
PMI	.000	1.1760	.7827	.3901	-.0653	-.3487	-.3970	-.4589	-.1816	-.0062	.0674	-.0934	-.2936	-.1031	.0226	.5262
30.000				.4355	-.0214	-.3238	-.3801	-.4451	-.3921	-.0111	-.1418	.2990	-.2021	-.1502	-.0732	-.0246
60.000				.5305	.0582	-.2616	-.3179	-.4080	-.0890	-.0157	-.4800	.5908	-.3122	-.1811	.0036	.0084
90.000			1.0440	.6615	.1833	-.1662	-.2338	-.3220	.1813	.4756	.3543	-.3751	-.1858	-.0825	-.0468	
120.000				.7765	.2957	-.0793	-.1545	-.2439	.1283	.5214	.1546	.2711	.1865	.0751	-.0220	-.1410
135.000									-.1513	.3649	.3649	.1884		-.0431		
150.000				.8352	.3436	-.0376	-.1108	-.2223	-.1517	.4057	.5042	.2245	.1900	-.0425	-.1658	-.2011

## PARAMETRIC DATA

MACH = 1.150 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000

## ARC11-716 1A14 CR+T12+S12M25 (R81749)

ALPHAT ( 1 ) = -8.530 BETAT ( 2 ) = -4.090

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
165.000					.3433	-.0365	-.1163	-.2146	-.1652	.3693	.5398	.3657	.1506	-.0241	-.1151	-.1942
180.000	1.1760	1.2000	.8083	.3150	-.0570	-.1331	-.2229	-.1533		.3150	.5400	.3688	.1017	-.0322	-.1393	-.1761
270.000		.8447								.4731						

X/LT .7460 .8530 .9280

PHI																
.000	-.0314	.0371	-.0281													
30.000	-.0393	.0217	.0295													
60.000	-.0161	.0360	.1608													
90.000	-.0200	.0445														
120.000	-.0299	.0114	.0680													
135.000	-.0314	-.0102	.0202													
150.000	-.0513	-.0614	.0362													
165.000	-.0301	-.0232	-.1224													
180.000	-.0311	-.0165	-.1114													

ALPHAT ( 1 ) = -8.530 BETAT ( 3 ) = .010

SECTION ( 1 )EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.1930	.8024	.3952	-.0320	-.3380	-.3899	-.4488	-.4488	-.3484	.0149	.0960	-.0741	-.2877	-.1280	.0155	.0320
30.000			.4098	-.0451	-.3341	-.3870	-.4477	-.3641	.0163	-.0295	-.2149	-.2398	-.1357	-.0494	-.0157	
60.000			.4623	.0022	-.3037	-.3595	-.4423	-.1143	.0370	-.4259	-.5579	-.2534	-.2233	-.0714	-.0018	
90.000		.9517	.5563	.0836	-.2426	-.3047	-.3878	.0332	.4829		-.4079	-.4081	-.1479	-.0835	-.0857	
120.000			.6727	.1964	-.1603	-.2278	-.3131	.1240	.4135	.2455	.2063	.1121	.0172	-.0821	-.1997	
135.000								-.0372		.3926		.0975		-.1281		
150.000			.7639	.2767	-.0919	-.1646	-.2708	-.2089	.3613	.4899	.1734	-.0153	-.1177	-.2487	-.2865	
165.000				.3113	-.0620	-.1400	-.2329	-.1856	.3603	.5415	.3122	.1372	-.0059	-.1041	-.1433	
180.000	1.1930	1.2000	.8143	.3177	-.0574	-.1303	-.2249	-.1188	.3065	.5286	.3853	.0722	.0014	-.1436	-.2301	
270.000		.9441							.4733							

X/LT .7460 .8530 .9280

PHI																
.000	-.0072	.0714	-.0389													
30.000	-.0353	.0646	.0098													
60.000	-.0112	.0708	.1944													
90.000	-.0294	.0447														
120.000	-.0271	.0173	-.0375													
135.000	-.0450	.0103	-.0993													
150.000	-.0625	-.0384	-.0899													



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81749)

EXTERNAL TANK

ARC11-716 1A14 01+T12+S12N25

ALPHAT ( 1 ) = -8.530 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PHI

165.000 -.0411 .0012 -.1363  
180.000 -.0362 -.0002 -.1066

ALPHAT ( 1 ) = -8.540 BETAT ( 4 ) = 4.120

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.1780 .7862 .3915 -.0631 -.3467 -.3976 -.4587 -.3450 .0089 .0751 -.0853 -.2974 -.1190 .0253 .0187  
30.000 .3790 -.0713 -.3496 -.4028 -.4583 -.1412 -.0008 .0114 -.1753 -.2580 -.0875 .0020 -.0088  
60.000 .3936 -.0574 -.3444 -.3935 -.4423 -.1080 -.0456 -.3563 -.3283 -.1966 -.1347 -.0917 -.0190  
90.000 .8496 .4538 -.0055 -.3122 -.3669 -.1108 -.0719 .4717 -.3763 -.4351 -.1343 -.0888 -.0904  
120.000 .5588 .0901 -.2400 -.3054 -.3757 .0653 .2569 .3124 .1406 .0631 -.0170 -.1289 -.2301  
135.000 .6733 .1936 -.1570 -.2264 -.3270 -.0440 .2888 .4336 .0537 -.1207 -.1926 -.3400 -.3223  
150.000 .2672 -.0983 -.1739 -.2696 -.1988 .2998 .4772 .2874 .0934 .0259 -.1038 -.2282  
165.000 1.1780 1.1940 .8035 .3075 -.0638 -.1395 -.2371 -.0713 .2753 .4758 .0057 -.1919 -.2475  
180.000 1.0420

X/LT .7480 .8530 .9280

PHI

.000 -.0428 .0401 -.0313  
30.000 -.0465 .0421 -.0314  
60.000 -.0337 .0585 .1468  
90.000 -.0871 -.0407  
120.000 .0662 -.0511 -.1287  
135.000 .0929 -.0651 -.1992  
150.000 -.1077 -.1294 -.2122  
165.000 -.0832 -.0618 -.2222  
180.000 -.0828 -.0643 -.2986

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ARC11-716 1A14 01+712+S12N25 (R81749)

ALPHAT ( 1 ) = -0.570 BETAT ( 5 ) = 0.280

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.8380
PMI															
.000	1.1250	.7570	.3969	-.0769	-.3657	-.4200	-.4798	-.1083	-.0348	.0219	-.1314	-.2463	-.1160	-.0488	-.0223
30.000			.3273	-.1124	-.3770	-.4273	-.3485	-.1061	-.0409	-.0298	-.2084	-.2722	-.1122	-.0448	-.0292
60.000			.3228	-.1140	-.3772	-.4225	-.1102	-.1136	-.1259	-.1140	-.4657	-.1637	-.0859	-.0681	-.0584
90.000		.7473	.3373	-.0777	-.3642	-.3212	-.0782	-.1401	.3379		-.3678	-.4337	-.1771	-.1045	-.1385
120.000			.4523	-.0034	-.3098	-.3729	-.0350	-.0332	.2635	.2838	.1683	.0397	-.0701	-.1925	-.2959
135.000							-.0354		.3916			-.0078		-.2603	
150.000			.9816	.1127	-.2243	-.2900	-.3833	-.0629	.2634	.3331	.0463	-.1947	-.3185	-.4318	-.3641
165.000			.2196	-.1387	-.2114	-.3058	-.1913	.2491	.3930	.2548	.0949	.0103	-.1892	-.3169	
180.000	1.1250	1.1070	.7756	.2911	-.0797	-.1535	-.2467	-.0329	.2497	.4126	.3795	.0884	-.0440	-.2083	-.3095
270.000		1.1240													.4787

X/LT .7480 .8530 .9280

PMI

.000	-.0296	-.0177	-.0319												
30.000	-.0440	.0208	-.0370												
60.000	-.0381	.0298	.1268												
90.000	-.1744	-.1799													
120.000	-.1383	-.0953	-.1748												
135.000	-.1665	-.0987	-.2335												
150.000	-.1840	-.1630	-.2533												
165.000	-.1842	-.1167	-.2771												
180.000	-.1640	-.1455	-.3613												

ALPHAT ( 2 ) = -4.410 BETAT ( 1 ) = -0.260

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4310	.5030	.5980	.8380
PMI															
.000	1.1880	.8514	.4668	-.0012	-.3092	-.3635	-.4342	-.3953	.0297	.0677	-.1446	-.2259	-.1503	-.0367	-.0083
30.000			.5842	.0876	-.2393	-.3041	-.3806	-.3361	-.0183	-.1514	-.3262	-.1303	-.1359	-.1121	-.0185
60.000			.5680	.2044	-.1475	-.2173	-.3129	.0531	.1444	-.3540	-.5191	-.2733	-.1266	.0533	.0257
90.000		1.1770	.7956	.3030	-.0683	-.1433	-.2381	.3096	.5532		-.5637	-.3311	-.1500	-.0299	-.0081
120.000			.8222	.3413	-.0406	-.1191	-.2120	.1532	.4148	-.0434	.2354	.2670	.1559	.0494	-.0513
135.000							-.1443		.1756			.2252		.0453	
150.000			.7972	.3055	-.0654	-.1406	-.2459	-.1706	.2723	.4010	.2635	.1957	.0314	-.0917	-.1075
165.000			.2513	-.1147	-.1862	-.2785	-.2305	.2430	.4496	.3514	.1902	.0314	-.1271	-.1485	
180.000	1.1880	1.1090	.6795	.1918	-.1533	-.2225	-.3000	-.2645	.2101	.4649	.2992	.1005	-.0272	-.1474	-.1809
270.000		.7973													

X/LT .7480 .8530 .9280

PMI



(R81749)

EXTERNAL TANK

ARC11-716 IA14 01+112+S12N25

ALPHAT ( 2 ) = -4.410 BETAT ( 1 ) = -8.260

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI  
 .000 -.0810 -.0402 -.0278  
 30.000 -.0432 -.0331 .0068  
 60.000 .0174 .0779 .1151  
 90.000 .0276 .0963  
 120.000 -.0065 .1055 .2572  
 135.000 .0290 .1110 .1991  
 150.000 .0284 .0844 .2806  
 165.000 .0276 .0953 -.0294  
 180.000 .0043 .0761 -.0582

ALPHAT ( 2 ) = -4.320 BETAT ( 2 ) = -4.210

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI  
 .000 1.2350 .8954 .4919 .0217 -.2929 -.3494 -.4188 -.3735 .0650 .1165 -.0935 -.2518 -.1797 .0167 .0618  
 30.000 .5415 .0622 -.2552 -.3218 -.3916 -.3529 .0491 -.0440 -.2197 -.1159 -.0931 -.0033  
 60.000 .6182 .1282 -.2941 -.2720 -.3592 -.0700 .1801 -.3208 -.5116 -.2180 -.2065 -.0176 .0184  
 90.000 1.0980 .6947 .2032 -.1483 -.2195 -.3084 .1672 .5492 -.5481 -.3731 -.1548 -.0984 -.0424  
 120.000 .7412 .2503 -.1141 -.1896 -.2755 -.0726 .4290 .0161 .1763 .0836 -.0092 -.1332  
 135.000 .7515 .2579 -.1114 -.1837 -.2834 -.2197 .3044 .2493 .1126 .1424 -.0406 -.1423 -.1790  
 150.000 .2353 -.1279 -.1987 -.2899 -.2439 .2603 .4613 .2900 .0987 .0324 -.1253 -.1784  
 165.000 .7027 .2024 -.1450 -.2182 -.2879 -.2112 .2044 .4450 .0239 -.0329 -.1533 -.1983  
 180.000 .9005 .5825

X/LT .7480 .8530 .9280

PMI  
 .000 -.0238 .0190 -.0240  
 30.000 -.0158 .0347 .0322  
 60.000 .0142 .0901 .1423  
 90.000 .0102 .1256  
 120.000 .0240 .0724 .1499  
 135.000 .0061 .0607 .1078  
 150.000 .0233 .0272 .1682  
 165.000 .0049 .0492 -.0940  
 180.000 -.0131 .0375 -.0946

ARC11-716 1A14 01+T12+S12N25 (R81749)

ALPHAT( 2) = -4.320 BETAT( 3) = .010

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2510	.9076	.4922	.0140	-.2875	-.3427	-.4125	-.3694	.0818	.1293	-.0683	-.2447	-.2018	.0033	.0416
30.000		.5016	.0281	-.2807	-.3452	-.4097	-.3658	.0617	.0568	-.1646	-.2963	-.1303	-.0244	-.0004	
60.000		.5352	.0606	-.2603	-.3196	-.4054	-.1433	.1785	-.2754	-.4894	-.1652	-.0933	-.1283	-.0049	
90.000	1.0030		.5872	.0993	-.2265	-.2916	-.3737	.0586	.5581	-.5421	-.4236	-.1360	-.0899	-.0715	
120.000		.6439	.1548	-.1862	-.2568	-.3388	-.0252	.3511	.0986	.1562	.0831	.0118	-.0747	-.1935	
135.000							-.2140		.3026	.0444				-.1103	
150.000		.6906	.1970	-.1590	-.2228	-.3234	-.2621	.2603	.3776	.0639	-.0314	-.0991	-.2304	-.2713	
165.000			.2153	-.1392	-.2127	-.3027	-.2804	.2829	.4059	.2533	.5920	-.0200	-.1276	-.1646	
180.000	1.2510	1.1250	.7111	.2149	-.1402	-.2113	-.2986	-.1766	.2126	.4024	.3362	.0336	-.0093	-.1502	-.1818
270.000		.9984							.5517						

X/LT .7460 .8330 .9280

PHI

.000	-.0079	.0685	-.0085												
30.000	-.0150	.0654	.0025												
60.000	.0173	.0954	.1504												
90.000	-.0180	.0950													
120.000	.0163	.0613	.0194												
135.000	-.0081	.0554	-.0498												
150.000	-.0258	-.0063	-.0451												
165.000	-.0043	.0411	-.1074												
180.000	-.0108	.0427	-.1037												

ALPHAT( 2) = -4.310 BETAT( 4) = 4.110

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2330	.8924	.4878	.0222	-.2920	-.3481	-.4175	-.3753	.0678	.1077	-.0870	-.2544	-.1920	.0261	.0318
30.000		.4614	-.0071	-.3087	-.3666	-.4268	-.3575	.0428	.0551	-.1253	-.3074	-.1079	-.0145	.0400	
60.000		.4581	-.0085	-.3068	-.3607	-.4391	-.0762	.1352	-.2069	-.4344	-.1330	-.0481	-.0317		
90.000	.8985		.4850	.0250	-.2938	-.3489	-.4225	-.0176	.5911	-.5521	-.4655	-.1407	-.0944	-.0602	
120.000		.5378	.0651	-.2557	-.3188	-.3954	.0389	.1456	.2051	.0893	.0213	-.0296	-.1090	-.2027	
135.000							.0493		.2282	-.0243				-.1630	
150.000		.6144	.1216	-.2095	-.2737	-.3721	.0324	.2000	.3257	-.0270	-.1624	-.1734	-.3283	-.3101	
165.000			.1736	-.1757	-.2415	-.3327	-.2781	.2212	.3716	.2367	.0355	.0025	-.0930	-.1800	
180.000	1.2330	1.1210	.7034	.2074	-.1466	-.2161	-.3075	-.1472	.1953	.3681	.0304	.0015	-.1480	-.2278	
270.000		1.0960							.5381						

X/LT .7460 .8330 .9280

PHI



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1149)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+S12N25

ALPHAT ( 2 ) = -4.320 BETAT ( 4 ) = 4.110

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .8530 .9280

PHI  
.000 -.0332 .0058 -.0176  
30.000 -.0297 .0285 -.0140  
60.000 -.0410 .0436 .1109  
90.000 -.0392 .0228  
120.000 -.0447 -.0131 -.0947  
135.000 -.0710 -.0179 -.1693  
150.000 -.0780 -.0847 -.1898  
165.000 -.0559 -.0184 -.2062  
180.000 -.0553 -.0132 -.2904

ALPHAT ( 2 ) = -4.330 BETAT ( 5 ) = 8.260

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380  
PHI  
.000 1.1780 .8413 .4529 -.0021 -.3102 -.3700 -.4395 -.3847 .0277 .0489 -.1407 -.2175 -.1666 -.0546 -.0144  
30.000 .9969 -.0542 -.3432 -.3982 -.4589 -.4768 .0056 .0400 -.1685 -.2959 -.1188 -.0277 .0147  
60.000 .3780 -.0730 -.3904 -.3984 -.4289 -.0745 .0441 .1249 -.3904 -.1355 -.0542 -.0378 -.0282  
90.000 .7949 .3877 -.0614 -.3467 -.3960 -.0658 .5103 .4189 -.4338 -.2157 -.1180 -.1182  
120.000 .4411 -.0161 -.3215 -.3768 -.0419 -.0179 .0394 .2262 .0585 -.0099 -.0814 -.1936 -.2677  
135.000 .5258 .0482 -.2695 -.3304 -.3460 .0026 .3073 -.2519  
150.000 .1245 -.2075 -.2792 -.3656 -.0784 .2986 .0075 -.2312 -.3035 -.4272 -.3332  
165.000 .1850 -.1623 -.2349 -.3206 -.1232 .3251 .1866 .0333 -.0122 -.2015 -.2993  
180.000 .6742 .10280 .1823 .3226 .0469 -.0570 -.2296 -.3072  
270.0 1.1740 .5468

X/LT .7480 .8530 .9280

PHI  
.000 -.0667 -.0429 -.0323  
30.000 -.0533 .0127 -.0226  
60.000 -.0703 .0239 .0962  
90.000 -.1542 -.0704  
120.000 -.1084 -.0358 -.1393  
135.000 -.1384 -.0332 -.1968  
150.000 -.1352 -.0921 -.2273  
165.000 -.1234 -.0614 -.2485  
180.000 -.1334 -.0828 -.3235

(R81749)

EXTERNAL TANK

ARC11-716 1A14 01-112-512N25

ALPHAT( 3 ) = -.610 BETAT ( 1 ) = -8.270

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2030	.9351	.5543	.0716	-.2497	-.3120	-.3891	-.3496	.0891	.0877	-.1105	-.1692	-.1737	-.0910	.0011
30.000		.6621	.1764	-.1715	-.2415	-.3200	-.2827	-.2827	.0309	-.0697	-.2803	-.1035	-.0957	-.1043	-.0360
60.000		.7593	.2675	-.0954	-.1660	-.2674	.0789	.2625	.2625	-.2542	-.3432	-.1585	-.1576	.0147	.0435
90.000		1.1960	.8050	.3127	-.0622	-.1385	-.2320	.3353	.5747	-.5038	-.4218	-.2748	-.0468	.0048	.0048
120.000			.7772	.2906	-.0814	-.1575	-.2457	.1011	.3140	-.1703	-.1696	.2356	.2177	.0912	-.0021
135.000								-.1510		-.0214		.1418		.0726	
150.000			.7107	.2249	-.1337	-.2035	-.3037	-.2331	.1749	.2832	.2193	.1012	.0801	-.0664	-.0612
165.000				.1559	-.1878	-.2590	-.3398	-.2978	.1653	.3670	.2786	.1499	.0489	-.1019	-.0875
180.000	1.2030	1.0240	.5859	.1000	-.2226	-.2881	-.3399	-.2822	.1598	.3745	.2490	.0757	.0045	-.1422	-.1394
270.000		.6101							.6891						

W/LT .7460 .6530 .9280

PHI															
.000	-.0436	-.0361	-.0417												
30.000	-.0055	.0189	-.0118												
60.000	.0358	.1390	.1218												
90.000	.0444	.1644													
120.000	.0014	.2448	.3082												
135.000	.0524	.2358	.2312												
150.000	.0318	.1908	.2930												
165.000	.0641	.1911	-.0086												
180.000	.0447	.1465	-.0531												

ALPHAT( 3 ) = -.990 BETAT ( 2 ) = -4.120

DEPENDENT VARIABLE CF

SECTION ( 1 ) EXTERNAL TANK

W/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2340	.9875	.5643	.0931	-.2347	-.2974	-.3723	-.3316	.1218	.1364	-.0638	-.2079	-.1950	-.0370	.0328
30.000		.6336	.1384	-.1964	-.2665	-.3410	-.3014	.0897	.0314	-.2133	-.1896	-.1020	-.0797	.0039	.0039
60.000		.6824	.1875	-.1595	-.2267	-.3220	-.1548	.2809	.2809	-.2108	-.3731	-.1537	-.0619	-.1149	.0171
90.000		1.1180	.7068	.2143	-.1434	-.2132	-.3019	.1803	.5751	-.5083	-.4896	-.3008	-.1069	-.0365	-.0365
120.000			.6974	.2065	-.1488	-.2199	-.3053	-.0918	.3435	-.1123	-.1347	.0731	.1278	.0308	-.0803
135.000								-.2698		.1106		-.0361		.0116	
150.000			.6698	.1729	-.1721	-.2418	-.3346	-.2647	.2187	.3376	.1057	.0024	.0376	-.0986	-.1232
165.000				.1593	-.1978	-.2607	-.3478	-.2997	.1821	.3806	.2405	.0370	-.0162	-.1011	-.1034
180.000	1.2340	1.0380	.6108	.1087	-.2145	-.2803	-.3345	-.2080	.1395	.3428	.2674	-.0029	-.0253	-.1061	-.1439
270.000		.9171							.6223						

W/LT .7460 .6530 .9280

PHI															
.000															
30.000															
60.000															
90.000															
120.000															
135.000															
150.000															
165.000															
180.000															
270.000															



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 4888

(R81749)

EXTERNAL TANK

ARC11-716 IA14 OR-712+S12M25

ALPHAT ( 3 ) = -.990 BETAT ( 2 ) = -4.120

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7480 .8530 .9280

Psi

.000	.0073	.0129	-.0112
30.000	.0104	.0449	.0216
60.000	.0511	.1303	.1080
90.000	.0228	.1769	
120.000	-.0234	.1906	.2345
135.000	-.0039	.1716	.1652
150.000	-.0028	.1315	.2359
165.000	.0225	.1490	-.0681
180.000	.0151	.1148	-.0752

ALPHAT ( 3 ) = -.990 BETAT ( 3 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6360

Psi

.000	1.2730	1.0070	.9925	.1056	-.2238	-.2900	-.3637	-.3204	.1320	.1564	-.0359	-.1980	-.2248	-.0315	.0288
30.000			.9996	.1080	-.2224	-.2902	-.3612	-.3185	.1120	.1062	-.1413	-.2252	-.1284	-.0474	.0182
60.000			.8004	.1082	-.2188	-.2797	-.3682	-.2467	.3131	-.1909	-.3316	-.1759	-.0351	-.0476	-.0318
90.000		1.0270	.6050	.1199	-.2133	-.2778	-.3801	.0652	.5908		-.5343	-.3865	-.2090	-.1424	-.0780
120.000			.6099	.1230	-.2108	-.2772	-.3558	-.1294	.3172	-.0372	-.0877	-.0171	.0311	-.0166	-.1414
135.000								-.3050		.2047		-.1388		-.0417	
150.000			.6232	.1230	-.2077	-.2727	-.3611	-.2982	.1812	.3367	.0216	-.1245	-.0742	-.1560	-.2162
165.000				.1238	-.2057	-.2720	-.3562	-.3029	.1894	.3101	.2266	.0007	-.0546	-.1069	-.1352
180.000	1.2730	1.0390	.6181	.1178	-.2086	-.2733	-.3537	-.1341	.1590	.3022	.2832	-.0161	-.0859	-.0911	-.1291
270.000		1.0200							.5969						

X/LT .7480 .8530 .9280

Psi

.000	.0312	.0671	.0241
30.000	.0283	.0724	.0379
60.000	.0238	.1065	.0938
90.000	.0338	.1456	
120.000	.0224	.1370	.1271
135.000	.0053	.1300	.0389
150.000	-.0164	.0722	.0441
165.000	.0039	.1052	-.0873
180.000	.0199	.1069	-.0918

(R01749)

EXTERNAL TANK

ARC11-716 IAI4 ON-712-S12N25

ALPHAT(3) = -.990 BETAT(4) = 4.120

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

V/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2180	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6390
PMI															
.000	1.2590	.9651	.9803	.0633	-.2308	-.2930	-.3698	-.3319	.1213	.1368	-.0584	-.2032	-.2038	-.0451	.0467
30.000			.5323	.0583	-.2622	-.3227	-.3911	-.3516	.1026	.0823	-.1045	-.2422	-.1565	-.0131	.0273
60.000			.5065	.0270	-.2765	-.3337	-.4163	-.1219	.2580	-.0962	-.2881	-.1907	-.0640	.0039	.0112
90.000		.9226	.4998	.0230	-.2818	-.3399	-.4159	-.0016	.6148		-.5561	-.0415	-.0358	-.0247	-.0603
120.000			.5145	.0485	-.2711	-.3329	-.4066	.0061	.1601	.0473	-.0719	.0102	-.0147	-.0534	-.1537
150.000								.0190	.2284			-.1091		-.0908	
180.000			.5523	.0886	-.2537	-.3120	-.4043	-.0024	.1462	.2089	-.0459	-.2161	-.1237	-.2526	-.2499
195.000				.0976	-.2317	-.2961	-.3822	-.2339	.1686	.2913	.1777	-.0093	-.0036	-.0986	-.1333
190.000	1.2590	1.0370	.6097	.1167	-.2159	-.2783	-.3670	-.1872	.1413	.2996	.2917	-.0139	.0222	-.0780	-.1575
270.000		1.1120							.3789						

K/LT .7480 .8530 .9280

PMI

.000	.0076	-.0044	-.0003												
30.000	.0217	.0141	.0199												
60.000	-.0077	.0499	.1318												
90.000	-.0342	.0764													
120.000	-.0038	.0483	-.0306												
150.000	-.0218	.0421	-.1132												
180.000	-.0326	-.0138	-.1302												
195.000	-.0192	.0491	-.1676												
190.000	-.0235	.0627	-.2550												

ALPHAT(3) = -.990 BETAT(4) = 9.280

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

V/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2180	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6390
PMI															
.000	1.1990	.9327	.5473	.0709	-.2495	-.3157	-.3904	-.3500	.0848	.0810	-.1079	-.1678	-.1841	-.1047	-.0030
30.000			.4594	.0018	-.3046	-.3675	-.4321	-.1854	.0682	-.0624	-.1634	-.2844	-.1473	-.0382	.0186
60.000			.4146	-.0479	-.3284	-.3822	-.4524	-.0329	.1338	-.0269	-.2413	-.1981	-.0697	-.0344	-.0231
90.000		.6147	.3995	-.0472	-.3352	-.3881	-.4467	-.0670	.6561		-.4682	-.0406	-.0776	-.0680	-.1090
120.000			.4191	-.0344	-.3302	-.3844	-.4352	-.0312	.0251	.1378	-.0566	-.0317	-.0590	-.1418	-.2196
150.000								-.0341	.1214			-.0943		-.1822	
180.000			.4736	.0062	-.3009	-.3578	-.4141	-.0210	.1178	.2216	-.0669	-.2552	-.1967	-.3352	-.2830
195.000			.0532	.0532	-.2660	-.3285	-.4068	-.0182	.1455	.2600	.1443	-.0337	-.0189	-.1324	-.2403
190.000	1.1990	.8440	.5651	.0979	-.2328	-.2969	-.3757	-.1265	.1410	.2620	.2437	-.0240	-.0344	-.2258	-.2373
270.000		1.1940							.3791						

K/LT .7480 .8530 .9280

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - TA14A - VOL. 9

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ARC11-716 TA14 OL+T12+S12M25

(R81749)

EXTERNAL TANK

ALPMAT( 3 ) = -.990 BETAT ( 5 ) = 0.280

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

K/LT .7480 .6530 .9280

PHI	0.000	-0.014	-0.033	-0.0431
30.000	-0.007	.0066	-0.0189	
60.000	-0.0475	.0287	.1256	
90.000	-0.1171	.0230		
120.000	-0.0373	.0189	-0.0765	
150.000	-0.0677	.0172	-0.1497	
180.000	-0.0682	-0.0392	-0.1911	
190.000	-0.0798	-0.0110	-0.2047	
190.000	-0.0923	-0.0120	-0.3200	

ALPMAT( 4 ) = 4.080 BETAT ( 1 ) = -0.280

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE C<sub>p</sub>

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5380
PHI	1.1900	1.0350	.6633	.1789	-0.1695	-0.2387	-0.3189	-0.2823	.0739	.1037	-0.0573	-0.1172	-0.1305	-0.0823
30.000			.7722	.2822	-0.0835	-0.1594	-0.2458	-0.3065	.1487	.0183	-0.1269	-0.0944	-0.0478	-0.0420
60.000			.8258	.3356	-0.0409	-0.1150	-0.2212	-0.4451	.3827	-0.1304	-0.2003	-0.1248	.0357	.0470
90.000	1.1790		.7956	.3091	-0.0639	-0.1390	-0.2348	.3251	.5473		-0.3599	-0.2185	-0.0165	-0.0612
120.000			.6940	.2153	-0.1408	-0.2125	-0.2987	.0291	.1553	-0.3055	-0.3885	-0.2627	.2034	.1929
150.000			.5958	.1159	-0.2162	-0.2790	-0.3723	-0.2935	.0414	.1785	.1113	-0.1598	.0421	.0073
165.000				.0482	-0.2739	-0.3334	-0.4112	-0.3631	.0875	.3038	.2005	.0493	-0.0198	.0090
180.000	1.1900	.9132	.4767	.0080	-0.2968	-0.3347	-0.4212	-0.1559	.1063	.2838	.2127	.0099	-0.1990	-0.0186
270.000		.7864												-0.0714

K/LT .7480 .6530 .9280

PHI	0.000	.0054	-0.0188	-0.0324
30.000	.0511	.0753	-0.0097	
60.000	.0764	.1656	.0973	
90.000	.0562	.0765		
120.000	.1013	.3364	.3416	
150.000	.1187	.3245	.2673	
180.000	.1103	.2449	.3471	
190.000	.1255	.2361	.0070	
190.000	.0995	.1835	-0.0349	

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ARC11-71.6 1A14 OL+712+512M25 (R81749)

ALPMAT( 4) = 3.960 BETAT ( 2) = -4.110

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0400	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2390	1.0490	.6932	.1909	-.1534	-.2224	-.3041	-.2677	.1497	.1756	-.0166	-.1356	-.1368	-.0513	.0579
30.000			.7349	.2402	-.1220	-.1564	-.2760	-.2363	.1820	.1045	-.1134	-.1267	-.0932	-.0420	.0212
60.000			.7368	.2443	-.1185	-.1893	-.2860	-.0639	.3030	-.0818	-.1855	-.1657	-.0133	-.0030	.0157
90.000		1.0930	.6920	.2042	-.1505	-.2209	-.3098	.1594	.5427	-.4275	-.2826	-.0032	-.0420	-.0442	
120.000			.6189	.1327	-.1999	-.2681	-.3507	-.1487	.2105	-.2506	-.3704	-.2629	.0871	.1023	-.0022
135.000								-.3271		-.0925		-.2141		.0809	
150.000			.5995	.0780	-.2412	-.3051	-.3977	-.3327	.1192	.2273	.1048	-.1921	-.0771	-.0201	-.0628
165.000				.0459	-.2747	-.3313	-.4099	-.3330	.1147	.2723	.2082	.0438	-.1325	.0043	-.0524
180.000	1.2390	.9228	.4976	.0227	-.2850	-.3431	-.4142	-.0936	.0820	.2288	.2394	-.0075	-.1700	-.0233	-.0866
270.000		.9043							.5972						

K/LT .7480 .6530 .9280

PMI

.000	.0673	.0211	.0375
30.000	.0765	.0603	.0804
60.000	.0775	.1355	.1268
90.000	.0518	.1702	
120.000	.0545	.2630	.2374
135.000	.0710	.2567	.1679
150.000	.0748	.1966	.2404
165.000	.0881	.2341	-.0532
180.000	.0789	.1658	-.0756

ALPMAT( 4) = 3.960 BETAT ( 3) = .010

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0400	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2600	1.1080	.7013	.2028	-.1478	-.2206	-.3043	-.2632	.1563	.1992	.0037	-.1487	-.1172	-.0320	.0134
30.000			.6882	.1868	-.1591	-.2348	-.3118	-.2727	.1645	.1503	-.0869	-.1404	-.1070	-.0534	.0036
60.000			.6470	.1457	-.1879	-.2562	-.3474	-.1481	.3044	-.0249	-.1987	-.0874	-.0603	-.0343	-.0070
90.000		1.0080	.5906	.1066	-.2239	-.2912	-.3718	.0518	.5658	-.5113	-.2222	-.0541	-.1024	-.0694	
120.000			.5419	.0892	-.2569	-.3192	-.3929	-.1414	.2633	-.1907	-.3344	-.1834	.0245	.0225	-.0727
135.000								-.3076		.0527		-.2849		.0105	
150.000			.5198	.0469	-.2706	-.3332	-.4172	-.2794	.1214	.2569	.0414	-.2096	-.1304	-.0710	-.1431
165.000			.0290	-.2781	-.3385	-.4134	-.0643		.0941	.2302	.2147	-.0374	-.1080	-.0285	-.0796
180.000	1.2600	.9280	.5033	.0250	-.2820	-.3387	-.4119	-.0844	.0933	.2351	.2551	-.0391	-.2229	-.0177	-.0804
270.000		1.0080							.5681						

K/LT .7480 .6530 .9280

PMI



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 4003

ARC11-716 1A14 Q1+T12+S12+G5

(081740)

EXTERNAL TANK

ALPHAT (4) = 3.980 BETAT (3) = .010

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7400 .8530 .9280

PHI

.0000 .0269 .0799 .0560  
 30.0000 .0877 .0919 .0632  
 60.0000 .0446 .1240 .1304  
 90.0000 .0324 .1530  
 120.0000 .0411 .2319 .1330  
 150.0000 .0654 .1919 .0554  
 180.0000 .0396 .1434 .0632  
 165.0000 .0500 .1627 .0861  
 180.0000 .0641 .1610 .0909

ALPHAT (4) = 3.980 BETAT (4) = 4.150

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PHI

.0000 1.2430 1.0840 .6848 .1932 -.1529 -.2261 -.3109 -.2895 .1425 .1676 -.0129 -.1326 -.1510 -.0646 .0464  
 30.0000 .6109 .1236 -.2064 -.2759 -.3494 -.3148 .1904 .1468 -.0622 -.1750 -.1078 -.0601 .0297  
 60.0000 .5425 .0617 -.2366 -.3161 -.4010 -.0430 .1394 .0490 -.2908 -.0435 -.0616 .0025 .0037  
 90.0000 .9048 .0265 -.2914 -.3496 -.4199 -.0186 .5966 -.5091 -.0993 -.0642 -.0943 -.0322  
 120.0000 .4633 -.0039 -.3042 -.3634 -.4313 -.0356 .1737 -.1010 -.2531 -.0643 -.0299 -.0262 -.0465  
 135.0000 .4734 -.0726 -.3072 -.3607 -.4380 -.0534 .1739 -.1739  
 150.0000 .0122 -.2959 -.3570 -.4299 -.0551 .0638 .2375 .0988 -.2841 -.1439 -.1226 -.1840  
 165.0000 .9205 .0239 -.2922 -.3902 -.4207 -.1270 .1099 .2495 .1404 -.0622 .1104 .0003 -.0659  
 180.0000 1.1020 .5592 .2409 .2593 -.0489 -.2377 -.0143 -.0469

K/LT .7400 .8530 .9280

PHI

.0000 .0667 .0128 .0601  
 30.0000 .0447 .0226 .0466  
 60.0000 .2333 .0461 .1023  
 90.0000 .0322 .0992  
 120.0000 .0355 .1023 .0070  
 150.0000 .0224 .0694 -.0899  
 165.0000 .0143 .0343 -.0389  
 180.0000 .0251 .0632 -.1480  
 180.0000 .0300 .0961 -.2359

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## ARC11-71.6 1A14 ORIFICE SIZES (R081748)

ALPHAT ( 4 ) = 3.000 BETAT ( 5 ) = 8.320

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5900	.6300
PMI															
.000	1.1090	1.0720	.6561	.1701	-.1608	-.2307	-.3244	-.2008	.1036	.0674	-.0601	-.1215	-.1477	-.0637	-.0412
30.000			.5305	.0562	-.2615	-.3253	-.3958	-.3335	.1221	.1200	-.0811	-.1612	-.1219	-.0819	-.0115
60.000			.4392	-.0221	-.3210	-.3745	-.4542	-.0442	.0009	.1451	-.1174	-.0572	-.0931	-.0494	-.0392
90.000		.7969	.3912	-.0636	-.3476	-.3980	-.3957	-.0607	.6574		-.4374	-.0193	-.0720	-.1006	-.0823
120.000			.3763	-.0690	-.3503	-.4034	-.4124	-.0676	.0975	-.0318	-.2248	-.0530	-.0677	-.1026	-.1506
150.000								-.0743		.1798		-.1819		-.1208	
180.000			.4026	-.0558	-.3461	-.3927	-.2941	-.0993	.0236	.1529	-.0365	-.3268	-.1832	-.2255	-.2144
165.000					-.0313	-.3231	-.3869	-.4388	-.0623	.0899	.2134	.1227	-.0874	-.0814	-.1790
190.000	1.1090	.0590	.4773	-.0031	-.3032	-.3688	-.4400	-.0400	.1041	.2216	.2059	-.0757	-.0792	-.1828	-.1830
270.000		1.1810							.5601						

M/LT .7400 .8530 .9280

PMI

.000	.0074	-.0241	-.0420
30.001	.0125	-.0382	.0050
60.000	.0031	.0328	.0867
90.000	-.0075	.0722	
120.000	-.0036	.0669	-.0302
150.000	-.0263	.0996	-.1275
180.000	-.0478	.0073	-.1737
165.000	-.0259	.0203	-.1926
190.000	-.0440	.0091	-.3213

ALPHAT ( 5 ) = 8.110 BETAT ( 1 ) = -8.280

## SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

M/LT	.0000	.0000	.0490	.1130	.1700	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5900	.6300
PMI															
.000	1.1470	1.1140	.7604	.2759	-.0915	-.1666	-.2509	-.2141	.0370	.1318	-.0056	-.0420	-.0880	-.0612	-.0444
30.000			.6670	.3781	-.0067	-.0864	-.1775	-.1314	.2350	.0900	-.0818	-.0141	-.0017	.0119	.0313
60.000			.6729	.3067	.0013	-.0759	-.1859	.2307	.4631	-.0305	-.0937	-.0545	.0504	.0882	.0768
90.000		1.1310	.7663	.2937	-.0783	-.1540	-.2509	.3157	.4808		-.3240	-.2206	-.0201	.0596	.0941
120.000			.6069	.1440	-.1977	-.2670	-.3530	-.0318	-.0111	-.1666	-.3201	-.2593	.0301	.1249	.1170
150.000								-.1578		-.1646		-.2288		.1304	
180.000			.4863	.0205	-.2650	-.3491	-.4382	-.2515	-.0472	.1257	-.0487	-.2900	-.0104	.0184	.0387
165.000				-.0362	-.3355	-.3930	-.4695	-.1330	.0188	.2327	.1608	.0243	-.0463	.0366	.0338
190.000	1.1470	.8079	.3820	-.0684	-.2562	-.4080	-.4677	-.1180	.0280	.1975	.1730	-.0240	-.1440	.0031	-.0086
270.000		.7512							.5431						

M/LT .7400 .8530 .9280

PMI

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1749)

EXTERNAL TANK

ARC11-718 IA14 01+112+S12N25

ALPHAT ( 5 ) = 0.110 BETAT ( 1 ) = -0.280

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .0330 .9280

PHI  
.000 .0446 .0203 .0071  
30.000 .1011 .1155 .0753  
60.000 .1286 .2027 .1559  
90.000 .1464 .2197 .1559  
120.000 .1676 .3206 .2426  
135.000 .1949 .3224 .2138  
150.000 .1505 .2395 .3163  
165.000 .1556 .2322 -.0080  
180.000 .1220 .1833 -.0572

ALPHAT ( 5 ) = 0.100 BETAT ( 2 ) = -4.140

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0300 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
1.1960 1.1720 .7981 .3049 -.0691 -.1428 -.2349 -.1968 .1435 .2107 .0428 -.0385 -.0440 -.0430 .0149  
.000 .8278 .3359 -.0439 -.1242 -.2114 -.1725 .2490 .1724 -.0587 -.0204 -.0104 -.0110 .0059  
30.000 .7772 .2881 .0811 -.1323 -.2578 -.0627 .4551 .0171 -.1150 .0098 .0179 .0130 .0092  
60.000 1.0440 .6645 .1891 -.1624 -.2337 -.1607 .4643 .0587 -.1531 -.3880 -.2791 .0132 .0855 .0562  
90.000 .5401 .0702 -.2529 -.3177 -.3986 -.1029 .0587 -.1531 -.3880 -.2791 .0132 .0855 .0562  
120.000 .4803 -.0041 -.3086 -.3650 -.4480 -.1889 .0163 .1567 .0307 -.2572 -.0971 -.0247 -.0148  
135.000 .0323 -.3315 -.7894 -.4579 -.0976 .0477 .1901 .1322 .0207 -.1076 .0132 .0138 .0138  
165.000 1.1980 .8159 .3979 -.0612 -.3400 -.1913 -.8580 -.0785 .0277 .1701 .2047 -.0863 .1887 .0100  
180.000 .9376  
270.000

X/LT .7460 .0330 .9280

PHI  
.000 .0562 .0614 .0941  
30.000 .0741 .1159 .0780  
60.000 .0758 .1665 .1071  
90.000 .0812 .1594  
120.000 .1159 .3018 .2373  
135.000 .1291 .2086 .1739  
150.000 .1080 .2227 .2484  
165.000 .1318 .2314 -.0467  
180.000 .1137 .1951 -.0623

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ARC11-716 1A14 OR-T12-S12-25

EXTERNAL TANK

(R81749)

ALPHAT( 3) = 8.200 BETAT ( 3) = .010

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2160	1.1900	.8041	.3129	-.0663	-.1397	-.2335	-.1929	.1599	.2458	.0658	-.0658	-.0448	-.0199	.0080
30.000			.7657	.2750	-.0951	-.1727	-.2594	-.2210	.2500	.2251	-.0151	-.0676	-.0903	-.0328	-.0017
60.000			.6722	.1849	-.1677	-.2339	-.3321	-.1374	.3864	.0767	-.0927	-.0999	-.0249	-.0056	.0119
90.000		.9337	.5594	.0828	-.2480	-.3114	-.3952	.0275	.4798		-.3618	-.1629	.0180	.0107	-.0115
120.000			.4697	.0073	-.3059	-.3658	-.4418	-.0881	.1256	-.1190	-.3896	-.2421	.0013	.0301	-.0033
135.000								-.0694		-.0155		-.3286		.0193	
150.000			.4262	-.0376	-.3324	-.3837	-.4643	-.0782	.0164	.2200	.0140	-.2658	-.1227	-.0606	-.0661
165.000					-.0517	-.3417	-.3927	-.3023	.0154	.1819	.2026	-.0349	-.1237	-.0068	-.0027
180.000	1.2160	.8143	.4040	-.0552	-.3412	-.3946	-.3204	-.0719	.0288	.1949	.2240	-.0303	-.1889	-.0094	.0026
270.000		.9612							.4790						
X/LT	.7460	.8530	.9280												

PHI

.000	.0543	.1233	.1185
30.000	.0545	.1251	.1071
60.000	.0617	.1394	.1166
90.000	.0623	.1672	
120.000	.0937	.2075	.0767
135.000	.0900	.2010	.0224
150.000	.0764	.1906	.0457
165.000	.1086	.1864	-.0763
180.000	.1096	.1833	-.0984

ALPHAT( 5) = 8.180 BETAT ( 4) = 4.180

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1970	1.1680	.7896	.3006	-.0699	-.1449	-.2371	-.1952	.1124	.2063	.0454	-.0551	-.0466	-.0421	.0137
30.000			.6875	.2029	-.1469	-.2226	-.3020	-.2678	.2011	.2210	-.0064	-.0988	-.0945	-.0759	.0275
60.000			.5632	.0872	-.2407	-.3026	-.3912	-.0368	.1931	.1650	-.0621	-.0875	-.0878	-.0364	.0307
90.000		.8569	.4582	.0007	-.3094	-.3675	-.4420	-.0357	.5029		-.3804	-.4233	.0091	.0391	-.0045
120.000			.3977	-.0314	-.3419	-.3938	-.4631	-.0859	.0871	-.0380	-.3513	-.1976	.0058	.0350	-.0212
135.000								-.0766		.1548		-.2808		.0124	
150.000			.3887	-.0672	-.3500	-.4034	-.4717	-.0981	.0310	.2337	.0254	-.2655	-.1364	-.0505	-.1084
165.000					-.0698	-.3904	-.4024	-.4664	.0436	.2356	.1487	-.1045	-.1194	.0175	.0127
180.000	1.1970	.8180	.3996	-.0643	-.3465	-.3968	-.4672	-.0784	.0650	.2211	.2230	-.0771	-.1763	.0267	-.0040
270.000		1.0570							.4747						
X/LT	.7460	.8530	.9280												

PHI



(RB1749)

EXTERNAL TANK

ARC11-716 1A14 01\*12+S12N25

ALPHAT( 5) = 0.180 BETAT ( 4) = 4.180

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	.0470	.0609	.0764
30.000	.0258	.0419	.0972
60.000	.0435	.0815	.1732
90.000	.0437	.1398	
120.000	.0749	.1433	-.0023
135.000	.0641	.1310	-.0771
150.000	.0445	.0713	-.0733
165.000	.0746	.1185	-.1376
180.000	.0726	.1177	-.2258

ALPHAT( 5) = 8.140 BETAT ( 5) = 8.390

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000	1.1440	1.1150	.7598	.2845	-.0828	-.1588	-.2516	-.2076	.0296	.1166	.0029	-.0384	-.0869	-.0527	-.0479
30.000			.5922	.1261	-.2108	-.2802	-.3564	-.3239	.1556	.2144	-.0066	-.0946	-.1278	-.1029	-.0802
60.000			.4478	-.0091	-.3154	-.3706	-.4315	-.0824	.2631	.1675	-.0334	-.0773	-.0835	-.0734	-.0166
90.000		7483	.3594	-.0810	-.3623	-.4218	-.1205	-.1130	.5082	-.4037	-.1466	-.0380	-.0580	-.0835	
120.000			.3236	-.1080	-.3749	-.4253	-.1351	-.0757	-.0285	-.0015	-.3298	-.0390	-.0287	-.0560	-.0936
135.000			.3350	-.1114	-.3767	-.4229	-.1560	-.0860	.0089	.1089	-.0264	-.2854	-.1256	-.1454	-.1494
150.000				-.1011	-.3710	-.4233	-.1621	-.0962	.0194	.1909	.0997	-.1142	-.0590	-.0732	-.1027
165.000	1.1440	.7328	.3774	-.0928	-.3626	-.4196	-.3848	-.0785	.0810	.1704	.1429	-.0861	-.0453	-.0968	-.1031
180.000		1.1420							.4873						

X/LT .7460 .8530 .9280

PHI

.000	.0357	.0193	.0299
30.000	.0150	-.0097	.0458
60.000	.0447	.0670	.1360
90.000	.0003	.1042	
120.000	.0416	.1072	-.0263
135.000	.0200	.0950	-.1088
150.000	-.0107	.0279	-.1342
165.000	.0211	.0613	-.1622
180.000	.0003	.0397	-.3037

(RB1750) ( 14 FEB 74 )

EXTERNAL TANK

ARC11-716 IA14 CR+T12+312N25

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
LREF = 36.7090 INCHES YMRP = .0000 INCHES  
BREF = 36.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

MACH = 1.250 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

PARAMETRIC DATA

ALPHAT ( 1 ) = -8.560 BETAT ( 1 ) = -8.160

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1810	.7856	.4003	-.0270	-.3445	-.3976	-.4554	-.3572	-.0207	.0359	-.1200	-.2276	-.2159	-.0346
30.000				.4879	.0483	-.2897	-.3508	-.4170	-.3372	-.1372	-.2710	-.3652	-.2700	-.1670	-.1415
60.000				.6295	.1727	-.1861	-.2516	-.2966	-.1121	.0375	-.3995	-.5286	-.4549	-.2212	-.0974
90.000				.7884	.3136	-.0679	-.1404	-.1933	.2458	.5420	-.3902	-.2358	-.2844	-.1940	-.0605
120.000				.8914	.4155	.0128	-.0651	-.1232	-.0481	.5199	.1204	.2823	.3144	.2140	-.0430
135.000								-.0573		.3141		.2855		.1018	
150.000				.9084	.4285	.0232	-.0542	-.1216	-.0684	.1352	.5089	.3325	.2716	.1016	-.0692
165.000				.3701	-.0124	-.0867	-.1467	-.1085	.2462	.5286	.4218	.2624	.0803	-.0347	-.0904
180.000				.8065	.3162	-.0542	-.1251	-.1696	-.1527	.1975	.5083	.3678	.1946	.0346	-.2009
270.000				.1810	1.2175	.8065	.3162	-.0542	-.1251	.1975	.5083	.3678	.1946	.0346	-.2009
				.7874					.3852						
X/LT	.7460	.8530	.9280												

ALPHAT ( 1 ) = -8.520 BETAT ( 2 ) = -4.080

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.2300	.8293	.4275	-.0103	-.2731	-.3255	-.3797	-.3432	.0076	.1046	-.0302	-.2034	-.2372	-.0036
30.000				.4745	.0305	-.2499	-.3037	-.3654	-.3270	-.0559	-.1027	-.2177	-.2588	-.1438	-.0455
60.000				.5687	.1088	-.1918	-.2495	-.3326	-.2666	.0409	-.3942	-.4973	-.4192	-.2387	-.1075
90.000				.6929	.2214	-.1067	-.1709	-.2574	.0983	.3280	-.4037	-.2812	-.3176	-.2421	-.0950
120.000				.8030	.3248	-.0252	-.0966	-.1843	-.1590	.4390	.1994	.2920	.2195	.1459	-.1173
135.000								-.1296		.3923		.2100		.0328	
150.000				.6804	.3734	.0115	-.0594	-.1634	-.1086	.3275	.5054	.2235	.1763	.0372	-.1480



(R81790)

EXTERNAL TANK

ARC11-716 IA14 0A+712+S12H25

ALPHAT( 1 ) = -8.520 BETAT ( 2 ) = -4.080

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
165.000				.3745	.0115	-.0625	-.1575	-.1200	.2710	.5241	.4002	.1921	.0741	-.0184	-.1316
180.000	1.2300	1.2400	.8338	.3484	-.0054	-.0789	-.1636	-.1351	.2025	.5070	.4162	.1306	.0652	-.0320	-.1459
270.000		.8918													.9007

X/LT .7460 .8530 .9280

PHI

.000	-.0268	-.0344	-.0438
30.000	-.0437	-.0435	.0148
60.000	-.0479	-.0196	.1105
90.000	-.0752	-.0077	
120.000	-.1175	-.0566	.0991
135.000	-.0892	-.0021	-.0006
150.000	-.1243	-.0817	-.0088
165.000	-.1304	-.0226	-.1438
180.000	-.1257	.0058	-.2276

ALPHAT( 1 ) = -8.510 BETAT ( 3 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.2450	.8444	.4375	-.0039	-.2652	-.3191	-.3759	-.3337	.0162	.1113	-.0040	-.2046	-.2115	-.0422	.0220
30.000			.4512	.0083	-.2637	-.3165	-.3726	-.3266	-.0377	-.0046	-.1395	-.2555	-.1502	-.0648	-.0267
60.000			.5026	.0550	-.2363	-.2904	-.3641	-.2287	.0194	-.3728	-.5176	-.2440	-.2134	-.0816	-.0124
90.000		.9950	.5952	.1332	-.1791	-.2397	-.3139	.0428	.5416	-.2698	-.3179	-.2611	-.0804	-.0770	
120.000			.7059	.2334	-.1024	-.1697	-.2480	-.2099	.4398	.2718	.2391	.1460	.0737	-.0063	-.1636
135.000								-.1835		.4285		.1360		-.0466	
150.000			.7943	.3100	-.0431	-.1107	-.2036	-.1658	.3553	.5534	.1482	.0024	-.0422	-.1586	-.2253
165.000				.3452	-.0110	-.0872	-.1750	-.1428	.0660	.5766	.3382	.2078	.0880	-.0079	-.1509
180.000	1.2450	1.2400	.8402	.3517	-.0094	-.0796	-.1679	-.1134	.1638	.5360	.4293	.1207	-.0032	-.0550	-.1553
270.000		.9895													.5239

X/LT .7460 .8530 .9280

PHI

.000	-.0158	-.0305	-.0292
30.000	-.0473	-.0406	.0265
60.000	-.0366	-.0177	.2002
90.000	-.0937	-.0071	
120.000	-.1260	-.0382	-.0305
135.000	-.1260	-.0554	-.1037
150.000	-.1200	-.1231	-.1154



ARC11-716 IA14 CR+712+S12M25 (RB1790)

ALPHAT ( 1 ) = -0.510 BETAT ( 3 ) = .000

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PHI

165.000 -.1061 -.0602 -.1576  
 180.000 -.1690 -.0469 -.1783

ALPHAT ( 1 ) = -0.520 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.000 1.2500 .8274 .4235 -.0118 -.2744 -.3244 -.3825 -.3495 -.0004 .0824 -.0487 -.2194 -.2336 -.0528 .0012  
 30.000 .4096 -.0256 -.2820 -.3286 -.3802 -.3370 .0144 .0689 -.0980 -.2693 -.1792 -.0387 -.0176  
 60.000 .4306 -.0097 -.2810 -.3223 -.3897 -.2036 .0012 -.3104 -.2034 -.1424 -.1616 -.0513  
 90.000 .8933 .4941 .0475 -.2447 -.2973 -.3691 -.0293 .9026 -.2837 -.3513 -.2015 -.1212 -.0694  
 120.000 .5965 .1371 -.1757 -.2366 -.3145 .0318 .1863 .3445 .1910 .1023 .0336 -.0619 -.2122  
 135.000 .7084 .2308 -.1009 -.1649 -.2618 -.2220 .2543 .3720 .1185 -.0573 -.1173 -.2555 -.3028  
 150.000 .3045 -.0432 -.1146 -.2065 -.1693 .2570 .4293 .4033 .3352 .1506 .1072 .0470 .1916  
 180.000 1.2300 1.2330 .8314 .3474 -.0125 -.0831 -.1771 -.0936 .4174 .4301 .1337 .0785 -.1140 -.1874  
 270.000 1.0630

X/LT .7460 .6530 .9280

PHI

.000 -.0594 -.0426 -.0230  
 30.000 -.0505 -.0336 -.0124  
 60.000 -.0435 -.0182 .1771  
 90.000 -.0979 -.0654  
 120.000 -.1127 -.0882 -.1149  
 135.000 -.1421 -.1011 -.1894  
 150.000 -.1606 -.1608 -.2100  
 165.000 -.1365 -.0956 -.2180  
 180.000 -.1922 -.1011 -.2744



ARC11-716 1A14 0A+T12+S12N25

(R81750)

ALPHAT (1) = -0.590 BETAT (3) = 0.220

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1770	.7760	.3985	-.0312	-.2969	-.3487	-.4064	-.3715	-.0233	.0519	-.2865	-.2312	-.2323	-.0832	-.0183
30.000			.3664	-.0619	-.3110	-.3570	-.3902	-.3272	-.0114	.0768	-.1026	-.2633	-.1770	-.0479	-.0074
60.000			.3638	-.0595	-.3092	-.3532	-.3834	-.0959	-.0955	-.2380	-.4578	-.1852	-.0971	-.1086	-.0321
90.000		.7855	.3994	-.0280	-.2958	-.3450	-.2917	-.0959	.3899		-.3396	-.3729	-.1842	-.1305	-.0842
120.000			.4930	.0525	-.2438	-.3019	-.3718	.0093	.0514	.2960	.1403	.0697	-.0164	-.1321	-.2652
135.000							-.0103			.3514		.5248		-.1890	
150.000			.6160	.1573	-.1581	-.2233	-.3121	-.2753	.1811	.3055	.0994	-.1636	-.2128	-.3420	-.3755
165.000				.2555	-.0804	-.1508	-.2407	-.1962	.1880	.3410	.2607	.1343	.0739	-.1281	-.2697
180.000	1.1770	1.1370	.8079	.3264	-.0263	-.0986	-.1882	-.0583	.2004	.3386	.3633	.1353	.0413	-.1451	-.2450
270.000		1.1640							.5318						

K/LT .7460 .8350 .9280

PHI

.000	-.0279	-.0483	-.0359												
30.000	-.0548	-.0355	-.0449												
60.000	-.0580	-.0183	.1441												
90.000	-.1769	-.2049													
120.000	-.1388	-.1190	-.1449												
135.000	-.1737	-.1164	-.2050												
150.000	-.2026	-.1693	-.2387												
165.000	-.1820	-.1156	-.2568												
180.000	-.1959	-.1995	-.3073												

ALPHAT (2) = -4.280 BETAT (1) = -0.180

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2320	.8920	.4998	.0543	-.2419	-.2957	-.3595	-.3381	-.0902	.0885	-.0796	-.2155	-.1893	-.1406	-.0546
30.000			.5968	.1342	-.1759	-.2398	-.3096	-.2820	.0084	.1576	-.3409	-.1385	-.1152	-.1234	-.1042
60.000			.7182	.2413	-.0936	-.1596	-.2496	-.2084	.1850	-.2409	-.5055	-.2605	-.1810	.0269	.0086
90.000		1.2120	.8175	.3336	-.0215	-.0928	-.1836	.1980	.5915		-.5334	-.2506	-.2773	-.0647	-.0327
120.000			.8485	.3655	-.0002	-.0715	-.1618	-.1352	.4218	-.0037	-.2190	.2918	.2275	.1075	-.0346
135.000							-.1248			.1186		.2209		.1031	
150.000			.8202	.3362	-.0228	-.0933	-.1884	-.1406	.2384	.3936	.2347	.2273	.1164	-.0204	-.0644
165.000				.2804	-.0660	-.1350	-.2209	-.1863	.1123	.4573	.3431	.2146	.0751	-.0714	-.0964
180.000	1.2320	1.1390	.7063	.2277	-.0988	-.1551	-.2443	-.2278	.0872	.4546	.3174	.1487	.0176	-.0934	-.1762
270.000		.8387							.5667						

K/LT .7460 .8350 .9280

PHI

(RBITS)

EXTERNAL TANK

ARC11-716 1A14 Q1-T12-S12N25

ALPHAT ( 2 ) = -4.280 BETAT ( 1 ) = -8.180

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .7480 .8530 .9280

PMI

.0000 -.0335 -.0569 .0022  
 30.0000 -.0623 -.0343 .0341  
 60.0000 -.0306 .0343 .1431  
 90.0000 -.0658 .0076  
 120.0000 -.0895 .1092 .2786  
 135.0000 -.0476 .1246 .2093  
 150.0000 -.0715 .0764 .2532  
 165.0000 -.0896 .0785 .0562  
 180.0000 -.0686 .0603 -.0414

ALPHAT ( 2 ) = -4.280 BETAT ( 2 ) = -4.090

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PMI

.0000 1.2820 .9388 .5252 .0667 -.2280 -.2839 -.3464 -.3126 -.0721 .1516 -.0136 -.1821 -.2198 -.0820 .0145  
 30.0000 .5774 .1125 -.1955 -.2569 -.3228 -.2874 -.0041 -.0163 -.2176 -.2176 -.2174 -.0950 -.1044 -.0524  
 60.0000 .6475 .1740 -.1480 -.2099 -.2900 -.2520 .1886 -.2318 -.4706 -.2225 -.1931 -.0486 .0034  
 90.0000 1.1340 .7205 .2367 -.0979 -.1627 -.2462 -.0982 .5834 -.4993 -.2893 -.2767 -.0378 -.0540  
 120.0000 .7664 .2786 -.0661 -.1338 -.2167 -.1694 .4223 .0659 -.1603 .1741 .1416 .0476 -.1084  
 135.0000 .7764 .2829 -.0603 .1299 -.2220 -.1678 .2327 .4576 .1192 .1192 .0536 -.0644 -.1348  
 150.0000 .2628 -.0766 -.1412 -.2289 -.1922 .1890 .4412 .3192 .1456 .0338 -.0503 -.1319  
 165.0000 1.2820 1.1530 .7303 .2353 -.0924 -.1588 -.2361 -.2023 .3860 .3595 .0795 .0523 -.0426 -.1148  
 180.0000 .9409 .6027

X/LT .7480 .8530 .9280

PMI

.0000 -.0300 -.0433 -.0156  
 30.0000 -.0490 -.0321 .0351  
 60.0000 -.0300 .0155 .1198  
 90.0000 -.0775 .0645  
 120.0000 -.1418 .0526 .1561  
 135.0000 -.1020 .0594 .0896  
 150.0000 -.1269 .0094 .1248  
 165.0000 -.1327 .0269 -.0739  
 180.0000 -.1184 .0100 -.1122

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 5003

(RB1750)

EXTERNAL TANK

ARC11-716 IA14 ON+T12+S12U25

ALPHAT ( 2 ) = -4.250 BETAT ( 3 ) = .020

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5380
PMI														
.000	1.2990	.9314	.5309	.0752	-.2200	-.2773	-.3390	-.3025	-.1028	.1650	.0081	-.1705	-.2319	-.0629
30.000			.5399	.0789	-.2189	-.2742	-.3379	-.2991	.0195	.0918	-.1194	-.2187	-.1366	-.0728
60.000			.5724	.1067	-.1966	-.2571	-.3294	-.2823	.1645	-.2035	-.4277	-.1745	-.0768	-.1390
90.000		1.0440	.6221	.1569	-.1544	-.2262	-.3031	-.2435	.5807		-.4849	-.3255	-.1794	-.0694
120.000			.6765	.1994	-.1284	-.1928	-.2707	-.2450	.2724	.1401	-.1802	.1176	.0412	-.1503
135.000								-.2253		.3313	.0307		-.0249	
150.000			.7169	.2274	-.1030	-.1679	-.2552	-.2126	.2363	.3469	.1179	-.0251	-.0896	-.1294
165.000			.2440	-.0904	-.1571	-.2406	-.2072	.2472	.2472	.3945	.2946	.1322	-.0270	-.0471
180.000	1.2990	1.1560	.7407	.2910	-.0870	-.1548	-.2372	-.1793	.1494	.3697	.3840	.0752	-.0760	-.1383
270.000		1.0410						.5879						

X/LT .7460 .8330 .9280

PMI

.000	-.0101	-.0244	-.0079
30.000	-.0357	-.0294	.0086
60.000	-.0221	-.0012	.1440
90.000	-.0970	.0392	
120.000	-.1351	.0212	.0370
135.000	-.1239	.0169	-.0538
150.000	-.1510	-.0390	-.0570
165.000	-.1176	.0070	-.1239
180.000	-.1436	.0001	-.1050

ALPHAT ( 2 ) = -4.260 BETAT ( 4 ) = 4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5380
PMI														
.000	1.2800	.9321	.5211	.0645	-.2275	-.2818	-.3471	-.3147	-.0615	.1468	-.0071	-.1806	-.2285	-.0960
30.000			.4932	.0421	-.2459	-.2999	-.3565	-.3213	.0444	.1193	-.0707	-.2371	-.1742	-.0594
60.000			.4929	.0403	-.2456	-.2968	-.3648	-.3003	.1476	-.1422	-.3752	-.1166	-.0586	-.0763
90.000		.9424	.5214	.0645	-.2293	-.2810	-.3526	.0023	.6071		-.4854	-.3612	-.1279	-.0789
120.000			.5756	.1183	-.1966	-.2459	-.3258	-.1894	.1434	.2424	-.0354	.0502	-.0171	-.0505
135.000								-.2743		.2054		-.0093		-.0947
150.000			.6434	.1691	-.1549	-.2131	-.2995	-.2587	.1988	.3158	.0456	-.1356	-.1306	-.2458
165.000			.2134	-.1148	-.1032	-.2664	-.2308	.2107	.3372	.2759	.0963	-.0441	-.0162	-.1810
180.000	1.2800	1.1330	.7308	.2435	-.0944	-.1674	-.2443	-.1639	.1468	.3358	.3765	.0711	-.0356	-.0868
270.000		1.1290						.5836						

X/LT .7460 .8330 .9280

PMI

(R811750)

EXTERNAL TANK

ARC11-716 1A14 CR+T12+S12+23

ALPHAT( 2) = -4.260 BETAT ( 4) = 4.100

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .6530 .9280

PM1  
 .000 -.0348 -.0465 -.0143  
 30.000 -.0271 -.0321 .0059  
 60.000 -.0537 -.0196 .1224  
 90.000 -.0750 -.0053  
 120.000 -.0691 -.0351 -.0646  
 135.000 -.1200 -.0468 -.1466  
 150.000 -.1293 -.0916 -.1637  
 165.000 -.1167 -.0433 -.1764  
 180.000 -.1397 -.0417 -.2398

ALPHAT( 2) = -4.270 BETAT ( 5) = 8.170

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1760 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6360

PM1  
 .000 1.2260 .6829 .4919 .0496 -.2394 -.2961 -.3619 -.3345 -.0979 .0824 -.0543 -.2022 -.2032 -.1460 -.0368  
 30.000 .4331 -.0025 -.2731 -.3272 -.3616 -.3390 .0350 .0350 .0956 -.0727 -.2689 -.2088 -.0611 .0210  
 60.000 .4132 -.0176 -.2871 -.3327 -.3708 -.2715 .1936 .1936 -.0942 -.3335 -.1210 -.0865 -.0518 -.0040  
 90.000 .6369 .4285 -.0041 -.2781 -.3225 -.3699 -.0405 .5355 .5355 -.4175 -.3976 -.1369 -.1779 -.0654  
 120.000 .4768 .0415 -.2520 -.3081 -.3714 -.0128 .0181 .2934 .0846 -.0140 -.0539 -.1281 -.2498  
 135.000 .5601 .1040 -.2013 -.2598 -.3436 -.2577 .1439 .1009 .2742 .0358 -.2150 -.1887 -.3430 -.3410  
 165.000 .1663 -.1459 -.2111 -.2935 -.2810 .1432 .2851 .1980 .0690 .0027 -.1356 -.2703  
 180.000 1.2260 1.0540 .7050 .2251 -.1072 -.1719 -.2557 -.1345 .1444 .2709 .3086 .0828 .0282 -.1619 -.2373  
 270.000 1.2100 .5939

X/LT .7460 .6530 .9280

PM1  
 .000 -.0246 -.0635 -.0007  
 30.000 -.0201 -.0340 -.0042  
 60.000 -.0480 -.0268 .1124  
 90.000 -.1416 -.0826  
 120.000 -.1132 -.0497 -.0913  
 135.000 -.1460 -.0513 -.1471  
 150.000 -.1578 -.0917 -.1721  
 165.000 -.1507 -.0656 -.1675  
 180.000 -.1834 -.0831 -.2675

DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01-712-S12N25									
EXTERNAL TANK									
(RB1750)									
SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
ALPHAT (3) =	-0.550	BETAT (1) =	-0.200						
K/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.000	1.2500	.9014	.5091	.1251	-.1079	-.2471	-.3172	-.2901
90.000			.6098	.2111	-.1149	-.1801	-.2365	-.2282	.0817
80.000			.7050	.2994	-.0513	-.1163	-.2075	-.1392	.3016
70.000			.8206	.3421	-.0177	-.0882	-.1769	.1508	.6129
60.000			.8033	.3178	-.0369	-.1092	-.1923	-.1680	.3312
50.000								-.1842	-.0385
40.000			.7593	.2569	-.0978	-.1528	-.2393	-.2007	.1498
30.000			.1935	.1935	-.1353	-.1993	-.2779	-.2421	.0453
20.000			.6207	.1482	-.1663	-.2263	-.2967	-.2730	.0953
10.000			.8530						.6602
K/LT	.7460	.8530	.9280						

SECTION (1) EXTERNAL TANK									
DEPENDENT VARIABLE CP									
ALPHAT (3) =	-0.550	BETAT (2) =	-4.100						
K/LT	.0000	.0580	.0490	.1130	.1780	.1940	.2150	.2420	.2900
PMI	.000	1.3000	1.0290	.6154	.1425	-.1759	-.2352	-.3077	-.2741
90.000			.6642	.1858	-.1412	-.2066	-.2806	-.2460	.0691
80.000			.7072	.2209	-.1109	-.1746	-.2585	-.2015	.2988
70.000			.7317	.2454	-.0937	-.1612	-.2423	-.1645	.6051
60.000			.7239	.2362	-.0735	-.1688	-.2450	-.1951	.3382
50.000								-.2086	.1013
40.000			.6974	.2127	-.1181	-.1851	-.2667	-.2187	.1900
30.000			.1660	.1660	-.1420	-.2045	-.2818	-.2463	.1517
20.000			.6381	.1617	-.1555	-.2179	-.2882	-.2463	.0987
10.000			.9598						.6407
K/LT	.7460	.8530	.9280						

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 CR+712+312M25 (M81750)

EXTERNAL TANK

ALPHAT (3) = -.550 BETAT (2) = -4.105

DEPENDENT VARIABLE CP

SECTION (1) INTERNAL TANK

W/LT .7480 .6530 .9280

PMI  
 .0000 -.0127 -.0230 -.0163  
 30.0000 -.0337 -.0113 .0216  
 60.0000 .0003 .0448 .1107  
 90.0000 -.0401 .0841  
 120.0000 -.0389 .1133 .2384  
 150.0000 -.0625 .1146 .1919  
 180.0000 -.0744 .0765 .2478  
 210.0000 -.0630 .0905 -.0214  
 240.0000 -.0625 .0746 -.0301

ALPHAT (3) = -.550 BETAT (3) = .010

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

W/LT .0000 .0300 .0490 .1130 .1760 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5090 .5580 .6340  
 PMI  
 .0000 1.3130 1.0410 .6213 .1486 -.1670 -.2293 -.2590 -.2664 -.1807 .2072 .0411 -.1456 -.2056 -.0835 .0127  
 30.0000 .6212 .1464 -.1681 -.2298 -.2577 -.2659 .0857 .1224 -.0828 -.1668 -.1358 -.0702 .0071  
 60.0000 .6230 .1499 .1647 -.2245 .3077 -.2667 .2788 -.0832 -.2775 -.2000 .0278 .0343 .0442  
 90.0000 1.0560 .6305 .1593 .1605 -.2216 .2974 .2545 .5138 .4559 .4049 .2903 .1325 .0911  
 120.0000 .6371 .1646 .1547 .2167 .2911 .2431 .3572 .0238 .0585 .1515 .0250 .0100 .0102  
 150.0000 .6460 .1686 .1521 .2133 .2965 .2482 .2205 .3603 .0599 .1076 .1510 .0317 .0189  
 180.0000 .6572 .1672 .1510 .2106 .2922 .2548 .1827 .3374 .2864 .0636 .1403 .0030 .0180  
 210.0000 1.3130 1.0740 .6484 .1678 .1518 .2146 .2901 .3224 .3462 .0485 .1449 .0571 .0139  
 240.0000 1.0590 .6204

W/LT .7480 .6530 .9280

PMI  
 .0000 .0034 -.0086 .0036  
 30.0000 -.0028 -.0078 .0232  
 60.0000 -.0316 .0129 .0787  
 90.0000 -.0336 .0656  
 120.0000 -.1055 .0735 .1350  
 150.0000 -.0821 .0677 .0368  
 180.0000 -.1102 .0199 .0203  
 210.0000 -.0820 .0523 .0712  
 240.0000 -.0909 .0529 .0660

TABULATED PRESSURE DATA - IAI14A - VOL. 9

DATE 08 JAN 75

(R81750)

ARC11-715 IAI14 OR-T12-S12M25

EXTERNAL TANK

ALPHAT ( 3 ) = -.320 BETAT ( 4 ) = 4.100

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

W/LT	.0030	.0060	.0090	.0130	.0170	.0210	.0250	.0290	.0340	.0390	.0450	.0500	.0560	.0630
PMI														
.000	1.2970	1.0210	.0098	.1425	-.1717	-.2345	-.3071	-.2770	-.1672	.1784	.0223	-.1434	-.1872	-.1188
30.000			.5615	.0956	-.2034	-.2644	-.3270	-.2955	.0644	.1617	-.0446	-.1840	-.1919	-.0711
60.000			.5359	.0718	-.2217	-.2746	-.3486	-.2966	.1931	-.0295	-.2393	-.2141	-.0451	-.0124
90.000		.9353	.5292	.0705	-.2212	-.2767	-.3480	-.1102	.6361		-.4626	-.3240	-.2922	-.1378
120.000			.5461	.0340	-.2131	-.2707	-.3380	-.3037	.1682	.0935	-.0361	-.1226	-.0488	-.0467
150.000							-.2971		.2616		-.1405		-.0707	
180.000			.5033	.1127	-.1942	-.2515	-.3324	-.2854	.1453	.2019	.0532	-.2210	-.2330	-.1349
210.000				.1435	-.1722	-.2348	-.3123	-.2753	.1644	.3014	.2292	.0584	-.1201	-.0100
240.000	1.2970	1.0710	.6424	.1662	-.1563	-.2196	-.2963	-.2094	.1287	.2744	.3336	.0555	-.1580	-.0390
270.000		1.1900							.6146					-.1575

W/LT .7400 .8530 .9280

PMI

.000	-.0136	-.0300	-.0146
30.000	-.0061	-.0222	.0178
60.000	-.0205	.0026	.1000
90.000	-.0262	.0381	
120.000	-.0376	.0151	.0075
150.000	-.0751	.0029	-.0968
180.000	-.0897	-.0312	-.1144
210.000	-.0751	.0065	-.1402
240.000	-.0921	.0112	-.2059

ALPHAT ( 3 ) = -.540 BETAT ( 5 ) = 8.180

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

W/LT	.0030	.0060	.0090	.0130	.0170	.0210	.0250	.0290	.0340	.0390	.0450	.0500	.0560	.0630
PMI														
.000	1.2460	.9727	.5758	.1178	-.1904	-.2519	-.3216	-.2958	-.1257	.0794	-.0512	-.1551	-.1706	-.1783
30.000			.4880	.0434	-.2444	-.3012	-.3632	-.3338	.0565	.1106	-.0756	-.2324	-.2015	-.0972
60.000			.4440	.0036	-.2703	-.3200	-.3871	-.3298	.1256	.0179	-.2073	-.1951	-.0996	-.0327
90.000		.8511	.4328	-.0049	-.2764	-.3239	-.3863	-.0530	.6382		-.4599	-.0218	-.1423	-.0745
120.000			.4533	.0142	-.2662	-.3184	-.3808	-.0418	.6301	.1505	-.0288	-.0132	-.0924	-.0870
150.000							-.0535		.0839		-.1111			-.1360
180.000			.5076	.0516	-.2431	-.2930	-.3709	-.1708	.1032	.2150	-.0224	-.2818	-.2231	-.2590
210.000				.0979	-.2075	-.2640	-.3388	-.3048	.1159	.2405	.1684	.0160	-.0788	-.2142
240.000	1.2460	.9679	.6781	.1398	-.1745	-.2339	-.3096	-.1968	.1048	.2141	.2555	.0371	-.0490	-.1855
270.000		1.2340							.5226					-.2062

W/LT .7400 .8530 .9280

PMI

.000	-.0136	-.0300	-.0146
30.000	-.0061	-.0222	.0178
60.000	-.0205	.0026	.1000
90.000	-.0262	.0381	
120.000	-.0376	.0151	.0075
150.000	-.0751	.0029	-.0968
180.000	-.0897	-.0312	-.1144
210.000	-.0751	.0065	-.1402
240.000	-.0921	.0112	-.2059



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI44 - VOL. 9

(RB1750)

EXTERNAL TANK

ARC11-716 IAI4 ON-112+512MS

ALPHAT(3) = -.940 BETAT(5) = 0.100

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7400 .6530 .9200

PHI  
 .0000 -.0007 -.0400 -.0209  
 30.0000 .0009 -.0206 .0033  
 60.0000 -.0020 -.0294 .1532  
 90.0000 -.0067 -.0037  
 120.0000 -.0662 .0020 -.0334  
 150.0000 -.0071 .0020 -.1074  
 180.0000 -.1066 -.0411 -.1395  
 210.0000 -.0946 -.0121 -.1640  
 240.0000 -.1392 -.0246 -.2403

ALPHAT(4) = 3.070 BETAT(1) = -0.220

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0000 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5090 .6300  
 PHI  
 .0000 1.2340 1.0750 .6926 .2178 -.1131 -.1006 -.2544 -.2302 -.1098 .1377 -.0065 -.0945 -.1332 -.1037 -.0690  
 30.0000 .0028 .3165 -.0364 -.1081 -.1900 -.1573 .1555 .0316 -.1657 -.0777 -.0279 -.0399 -.0478  
 60.0000 .8547 .3638 .0042 -.0664 -.1661 -.1152 .4212 -.0359 -.2020 -.1201 .0307 .0330 .0116  
 90.0000 1.2100 .6256 .3417 -.0173 -.0902 -.1791 .1974 .5910 .3487 -.2254 -.0207 -.1398 -.1475  
 120.0000 .7281 .2510 -.0893 -.1555 -.2595 -.2042 .1986 -.2303 -.3490 -.3143 .1343 .2002 .1076  
 150.0000 .6290 .1571 -.1592 -.2228 -.3045 -.2665 .0274 -.0975 .1570 -.1311 -.0965 .0303 .0312  
 180.0000 .0976 -.2309 -.2717 -.3424 -.3029 -.0253 .2813 .2813 .2861 .1313 .1027 .0263 .0050  
 210.0000 .9501 .5085 .0616 -.2364 -.2931 -.3551 -.3015 .0780 .3347 .2835 .0906 .3276 -.0496 -.0421  
 240.0000 .6334 .0251

K/LT .7400 .6530 .9200

PHI  
 .0000 -.0027 .0022 -.0132  
 30.0000 -.0229 .0683 .0293  
 60.0000 .0130 .1156 .1099  
 90.0000 -.0761 -.0190  
 120.0000 .0428 .3033 .4080  
 150.0000 .0732 .2977 .3208  
 180.0000 .0559 .2459 .3823  
 210.0000 .0665 .2404 .0674  
 240.0000 .0728 .1937 .0050

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 OR+112+S12N25 (RB1750)

ALPHAT ( 4 ) = 5.980 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.2830	1.1280	.7257	.2358	-.0980	-.1625	-.2407	-.2128	-.1512	.2353	.0592	-.0955	-.1316	-.0634	-.0309	
30.000			.7668	.2745	-.0672	-.1374	-.2148	-.1826	.1790	.1444	-.0756	-.0808	-.0775	-.0399	-.0145	
60.000			.7660	.2737	-.0656	-.1319	-.2258	-.1767	.3908	-.0023	-.1704	-.1516	.0093	.0031	-.0076	
90.000	1.1310		.7215	.2413	-.0954	-.1612	-.2462	-.0855	.5783	-.3847	-.2531	.0079	-.0428	-.0729		
120.000			.6517	.1813	-.1436	-.2083	-.2855	-.2615	.2012	-.1868	-.3287	-.2937	.0433	.1087	.0188	
135.000								-.2681		-.0360		-.1642		.0849		
150.000			.5925	.1274	-.1857	-.2436	-.3229	-.2752	.1090	.1347	.1389	-.1313	-.1125	-.0028	-.0246	
165.000				.0915	-.2118	-.2702	-.3401	-.3007	.1117	.2948	.2647	.1292	.1555	-.0239	-.0200	
180.000	1.2830	.9604	.5283	.0681	-.2220	-.2778	-.3449	-.2524	.0557	.2192	.3156	.0874	-.2612	.0420	-.0917	
									.6294							
X/LT	.7460	.8530	.9280													

ALPHAT ( 4 ) = 4.030 BETAT ( 3 ) = .010

SECTION ( 1 )EXTERNAL TANK		DEPENDENT VARIABLE CP														
X/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.3010	1.1430	.7318	.2412	-.0898	-.1562	-.2368	-.2095	-.1472	.2735	.0899	-.1007	-.1213	-.0567	-.0148	
30.000			.7141	.2273	-.1027	-.1703	-.2457	-.2172	-.0129	.2286	-.0227	-.1053	-.0928	-.0540	-.0103	
60.000			.6740	.1945	-.1323	-.1936	-.2795	-.2307	.3145	.0438	-.1585	-.1120	-.0235	-.0292	-.0185	
90.000	1.0400		.6227	.1574	-.1634	-.2253	-.3029	-.0895	.5780	-.4226	-.2203	-.0326	-.0806	-.0811		
120.000			.5760	.1089	-.1969	-.2546	-.3239	-.2865	.2068	-.1248	-.2905	-.2657	.0013	.0417	-.0370	
135.000								-.2788		.0713		-.2647		.0375		
150.000			.5523	.0867	-.2127	-.2693	-.3459	-.2857	.1502	.2785	.0814	-.1569	-.2126	-.0201	-.0892	
165.000			.0795	-.2213	-.2740	-.3443	-.3035	.1254	.2496	.2773	.0632	-.1623	.0001	-.0423		
180.000	1.3010	.9592	.5362	.0769	-.2195	-.2751	-.3432	-.2568	.0913	.2364	.3254	.0563	-.1995	.0706	-.0266	
270.000		1.0430							.5940							
X/LT	.7460	.8530	.9280													

PHI

(RB1750)

EXTERNAL TANK

ARC11-716 IA14 OA+T12+S12N25

ALPHAT ( 4 ) = 4.030 BETAT ( 3 ) = .010

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI

.000	.0168	.0158	.0382
30.000	.0107	.0235	.0479
60.000	-.0034	.0478	.1121
90.000	-.0314	.0826	
120.000	-.0343	.1484	.1750
135.000	-.0237	.1429	.0960
150.000	-.0472	.0974	.1005
165.000	-.0012	.1259	-.0505
180.000	.0049	.1243	-.0326

ALPHAT ( 4 ) = 4.020 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .3080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5050 .6380

PHI

.000	1.2690	1.1250	.7179	.2327	-.1001	-.1643	-.2437	-.2170	-.1486	.2227	.0655	-.0926	-.1349	-.0744	-.0363
30.000			.6477	.1716	-.1482	-.2133	-.2835	-.2590	.0891	.1920	.0049	-.1451	-.1116	-.0803	-.0322
60.000			.5782	.1146	-.1983	-.2549	-.3311	-.2648	.3185	.0883	-.1605	-.0760	-.0314	-.0666	-.0308
90.000		.9454	.5269	.0684	-.2253	-.2822	-.3537	-.0193	.6140		-.2390	-.1317	-.0543	-.0900	-.0791
120.000			.4989	.0456	-.2425	-.2950	-.3619	-.2986	.1652	-.0625	-.2128	-.1820	-.0573	-.0292	-.0756
135.000								-.3194		.1638		-.2321		-.0399	
150.000			.5037	.0475	-.2424	-.2935	-.3665	-.3151	.0790	.2528	.0727	-.2685	-.2870	-.0764	-.1533
165.000				.0582	-.2345	-.2874	-.3595	-.3207	.1020	.2603	.2126	.0317	-.1689	.0017	-.0367
180.000	1.2890	.9536	.5335	.0585	-.2238	-.2801	-.3526	-.2980	.0798	.2259	.3118	.0342	-.2027	.0508	-.0559
270.000		1.1390													

X/LT .7460 .8530 .9280

PHI

.000	.0022	.0041	.0377
30.000	.0084	.0060	.0428
60.000	-.0002	.0145	.1010
90.000	-.0084	.0555	
120.000	-.0026	.0835	.0399
135.000	-.0148	.0751	-.0534
150.000	-.0374	.0377	-.0662
165.000	-.0129	.0732	-.1077
180.000	-.0241	.0799	-.1793

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

PAGE 9011

ALPHAT( 4) = 4.080 BETAT ( 5) = 8.250

(RB1T30)

EXTERNAL TANK

SECTION ( 1)EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.2380	1.0770	.6907	.2136	-.1109	-.1763	-.2551	-.2332	-.0861	.0878	.0035	-.0898	-.1459	-.1188
30.000				.5664	.1066	-.1947	-.2370	-.3271	-.3053	.0724	.1594	-.0231	-.1754	-.1368	-.1044
60.000				.4746	.0264	-.2549	-.3072	-.3741	-.3186	.2070	.1488	-.1371	-.0864	-.0741	-.0938
90.000			.8341	.4291	-.0088	-.2787	-.3305	-.3917	-.0346	.6459	-.4172	-.0516	-.0556	-.0753	-.0316
120.000				.4175	-.0175	-.2847	-.3335	-.3919	-.1378	.0644	.0114	-.1941	-.1196	-.1135	-.0982
135.000									-.1808	.1488		-.2078	-.0950		
150.000				.4404	-.0085	-.2763	-.3256	-.3975	-.2117	.0429	.1371	.0079	-.3201	-.2997	-.1513
165.000				.0208	-.2804	-.3167	-.3837	-.3305	.0635	.1991	.1688	-.0186	-.1965	-.0844	-.1468
180.000		1.2380	.8665	.5099	.0498	-.2402	-.2975	-.3689	.0889	.1737	.2245	.0049	-.2627	-.1164	-.1265
270.000			1.2190					-.2994	.6038						

X/LT .7450 .8330 .9280

PHI

.000	-.0134	-.0014	-.0080
30.000	.0302	.0018	.0206
60.000	.0028	.0063	.0070
90.000	.0004	.0543	
120.000	-.0005	.0514	.0228
135.000	-.0270	.0556	-.0787
150.000	-.0547	.0111	-.1230
165.000	-.0203	.0387	-.1390
180.000	-.0529	.0408	-.2355

ALPHAT( 5) = 8.150 BETAT ( 1) = -8.190

DEPENDENT VARIABLE CP

SECTION ( 1)EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.1920	1.1590	.7923	.3170	-.0387	-.1081	-.1939	-.1666	-.0396	.1534	.0444	-.0377	-.0370	-.0529
30.000				.8996	.4137	.0410	-.0359	-.1257	-.0895	.2759	.1177	-.0917	.0027	.0185	.0077
60.000				.9017	.4169	.0447	-.0272	-.1310	-.0701	.5048	.0588	-.1376	-.0142	.0479	.0562
90.000			1.1720	.7985	.3257	-.0324	-.1036	-.1942	.2362	.3329		-.3401	-.1735	-.0282	.0547
120.000				.6413	.1785	-.1492	-.2117	-.2904	-.1627	.0336	-.2228	-.3315	-.2377	-.0196	.0971
135.000									-.3024		-.2874		-.2319		.1191
150.000				.5229	.0694	-.2316	-.2900	-.3664	-.3359	-.1047	-.1378	-.0060	-.1424	-.0946	.0178
165.000				.0096	-.2749	-.3330	-.3986	-.3439	-.0414	.2133	.2297	.1045	-.1024	.0139	.0525
180.000		1.1920	.8479	.4145	-.0229	-.2959	-.3435	-.3973	.0294	.2651	.2688	.0584	-.3216	-.0405	.0196
270.000			.7894					-.3516	.5472						

X/LT .7460 .8330 .9280

PHI

(R81750)

EXTERNAL TANK

ARC11-716 1A14 01+T12+S12N25

ALPHAT (5) = 8.150 BETAT (1) = -8.190

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PHI  
 .000 -.0547 .0340 .0281  
 30.000 .0194 .1086 .0953  
 60.000 .0604 .1531 .1535  
 90.000 .1214 .1653  
 120.000 .1306 .3056 .3174  
 135.000 .1553 .3135 .2848  
 150.000 .1327 .2476 .3701  
 165.000 .1388 .2377 .0596  
 180.000 .1155 .1914 -.0016

ALPHAT (5) = 8.100 BETAT (2) = -4.070

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI  
 .000 1.2390 1.2100 .8257 .3399 -.0191 -.0925 -.1764 -.1480 -.0968 .2842 .1127 -.0369 -.0404 -.0214 -.0170  
 30.000 .8554 .3544 .0005 -.0716 -.1575 -.1254 .2496 .2140 -.0047 -.0101 .0089 .0014 .0022  
 60.000 .8067 .3181 .0335 -.1020 -.1961 -.1260 .4958 .0899 -.1388 .0185 .0344 .0224 .0009  
 90.000 1.0830 .6957 .2224 -.1096 -.1769 -.2608 .0584 .5175 -.3495 -.1272 -.0058 .0245 .0046  
 120.000 .5745 .1164 -.1945 -.2556 -.3296 -.2675 .0417 -.2559 -.3581 -.2550 .0006 .0815 .0701  
 135.000 .4957 .0459 -.2506 -.3041 -.3734 -.3280 -.1527 -.1527  
 150.000 .0089 -.2739 -.3274 -.3840 -.3285 .0753 .0351 -.2201 -.1548 .0145 .0134  
 165.000 .4309 -.0115 -.2792 -.3326 -.3888 .2439 .2561 .0935 -.2057 .0116 .0275  
 180.000 .8971 .4309 -.0115 -.2792 -.3326 -.3888 .0081 .2180 .2858 .0418 -.2448 .0391 -.0002  
 270.000 .9280 .5293

X/LT .7460 .8530 .9280

PHI  
 .000 -.0018 .0312 .0547  
 30.000 .0203 .0648 .0645  
 60.000 .0248 .0992 .1006  
 90.000 .0275 .0910  
 120.000 .0342 .2677 .2899  
 135.000 .0699 .2558 .2266  
 150.000 .0376 .2044 .2934  
 165.000 .0831 .2115 .0105  
 180.000 .0738 .1792 -.0100



ARC11-716 1A14 OI+T12+S12K25

(R81150)

EXTERNAL TANK

ALPHAT( 5) = 0.010 BETAT ( 3) = .010

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2360	1.2240	.8313	.3416	-.0164	-.0863	-.1760	-.1447	-.0897	.3249	.1394	-.0408	-.0462	-.0090	.0002
30.000			.7941	.3092	-.0443	-.1152	-.1957	-.1662	-.0586	.2846	.0380	-.0510	-.0452	-.0184	-.0032
60.000			.7045	.2248	-.1085	-.1742	-.2614	-.1891	.4735	.1279	-.1131	-.0489	-.0090	.0035	.0010
90.000		.9934	.5965	.1333	-.1820	-.2429	-.3212	-.1675	.5090		-.3359	-.1786	.0251	.0207	-.0056
120.000			.5074	.0572	-.2376	-.2946	-.3648	-.3133	.0773	-.1397	-.3466	-.2513	-.0224	.0366	.0087
135.000								-.3205		-.0386		-.2797		.0297	
150.000			.4639	.0168	-.2633	-.3124	-.3808	-.3207	.1311	.1848	.0820	-.2480	-.2162	-.0030	-.0434
165.000			.0056	-.0056	-.2725	-.3205	-.3866	-.2971	.0463	.2011	.2459	.0379	-.1390	.0098	.0137
180.000	1.2580	.8555	.4404	-.0028	-.2717	-.3259	-.3856	-.2016	.0501	.1921	.3180	.0570	-.2167	.0581	.0105
270.000		1.0500						.5192							

X/LT .7460 .8530 .9280

PHI

.000	.0161	.0437	.0783
30.000	.0193	.0514	.0778
60.000	.0206	.0681	.1056
90.000	.0214	.1073	
120.000	.0490	.1789	.1334
135.000	.0466	.1722	.0691
150.000	.0170	.1293	.0797
165.000	.0575	.1568	-.0164
180.000	.0623	.1538	-.0350

ALPHAT( 5) = 0.100 BETAT ( 4) = 4.160

DEPENDENT VARIABLE CP

SECTION ( 1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2410	1.2050	.8167	.3331	-.0248	-.0952	-.1797	-.1541	-.0922	.2634	.1117	-.0393	-.0458	-.0208	-.0253
30.000			.7164	.2409	-.0964	-.1644	-.2426	-.2168	.0859	.2658	.0554	-.0792	-.0762	-.0641	-.0333
60.000			.5984	.1340	-.1835	-.2418	-.3226	-.2751	.2891	.1876	-.0768	-.0444	-.0746	-.0371	-.0234
90.000		.8945	.4985	.0508	-.2483	-.3011	-.3367	-.1658	.5175		-.3536	-.3799	-.0010	-.0154	-.0141
120.000			.4385	-.0014	-.2805	-.3284	-.3898	-.2907	.0655	-.1327	-.3335	-.2205	-.0328	.0091	-.0143
135.000								-.3320		.1216		-.2930		-.0010	
150.000			.4224	-.0182	-.2865	-.3333	-.4004	-.3360	.0500	.2410	.0591	-.2652	-.2562	-.0373	-.0894
165.000				-.0145	-.2879	-.3339	-.3980	-.3482	.0437	.2600	.1980	-.0096	-.2048	.0000	.0478
180.000	1.2410	.6486	.4366	-.0111	-.2824	-.3328	-.3959	-.3119	.0389	.1792	.3134	.0514	-.1984	.0729	.0168
270.000		1.0910						.5273							

X/LT .7460 .8530 .9280

PHI

ARC11-716 IA14 CR+T12+S12M25 (RB1750)

ALPHAT ( 5 ) = 0.100 BETAT ( 4 ) = 4.160

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

PHI

.0000 -.0031 .0284 .0601  
 30.000 -.0026 .0086 .0786  
 60.000 .0156 .0381 .1613  
 90.000 .0290 .1102  
 120.000 .0386 .1279 .0345  
 135.000 .0354 .1105 -.0488  
 150.000 -.0016 .0698 -.0464  
 165.000 .0445 .1048 -.1072  
 180.000 .0413 .1085 -.1614

ALPHAT ( 5 ) = 0.080 BETAT ( 5 ) = 8.310

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5030 .5580 .6380

PHI

.0000 1.1920 1.1560 .7872 .3143 -.0342 -.1071 -.1965 -.1670  
 30.000 .6245 .1700 -.1548 -.2174 -.2914 -.2719  
 60.000 .4847 .0460 -.2554 -.3102 -.3463 -.3059  
 90.000 .7841 .3976 -.0331 -.3008 -.3498 -.3428 -.1655  
 120.000 .3649 -.0609 -.3160 -.3595 -.4103  
 135.000 .3691 -.0564 -.3141 -.3572 -.4182  
 150.000 .4168 -.3081 -.3582 -.4196  
 165.000 1.1780  
 180.000 .7909  
 270.000 1.1780

X/LT .7460 .8330 .9280

PHI

.0000 -.0311 .0304 .0273  
 30.000 .0298 -.0072 .0482  
 60.000 .0359 .0  
 90.000 .0002 .0836  
 120.000 .0346 .0963 .0123  
 135.000 .0253 .0891 -.0715  
 150.000 -.0163 .0362 -.1120  
 165.000 .0344 .0668 -.1253  
 180.000 .0140 .0583 -.2291



EXTERNAL TANK (RB1751) ( 14 FEB 74 )

## REFERENCE DATA

SREF =	2.4210 SQ.FT.	XWRP =	29.5800 INCHES
LREF =	36.7090 INCHES	YWRP =	.0000 INCHES
BREF =	36.7090 INCHES	ZWRP =	.0000 INCHES
SCALE =	.0300 SCALE		

MACH	=	1.400	ELEVON	=	.000
RUDDER	=	.000	SPDRK	=	.000

### PARAMETRIC DATA

```

ALPHAT( 1 ) = -0.500      BETAT( 1 ) = -0.220

```

## SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5050	.5960	.6380
PHI															
.000	1.2470	.7985	4259	.0163	-.2261	-.2696	-.3224	-.3069	-.1128	.0533	-.0490	-.1850	-.1827	-.1590	-.0807
30.000			.5121	.0924	-.1774	-.2297	-.2877	-.2829	-.0960	-.2053	.3925	-.2221	-.1302	-.1493	-.1343
60.000			.6557	.2172	-.0842	-.1424	-.2236	-.2049	.0760	-.2905	.5085	.3792	-.2591	-.0165	-.0124
90.000	1.2070		.8179	.3520	.0244	-.0410	-.1280	-.1091	.6097		-.4851	-.0974	-.1590	-.1498	-.0595
120.000			.9222	.4463	.0964	.0266	-.0615	-.0393	.5806	.1930	-.0958	.3798	.2915	.1965	.0324
150.000								-.0301		.2301		.2681		.1936	
180.000									.2502	.4348	.3304	.2369	.2129	.0835	.0208
210.000			.9365	.4565	.1049	.0372	-.0620	-.0209	-.0326	.4910	.4454	.3149	.2012	.0393	.0199
240.000				.4131	.0721	.0030	-.0834	-.0612							
270.000									-.0095	.4434	.4372	.2912	.0491	.0190	-.0563
300.000	1.2470	1.2990	.8318	.3618	-.0335	-.0299	-.1099	-.0987							
								.3627							

[illegible]
$$\text{BETA}^*(2) = -0.460 \quad \text{BETA}^*(2) = -4.110$$

## SECTION 11 EXTERNAL TANK

DEPENDENT VARIABLE CP

[illegible]



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - V/L 9

(RB1T51)

EXTERNAL TANK

ARC11-716 IA14 OI+T12+S12N25

ALPHAT (1) = -8.480 BETAT (2) = -4.110

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PMI

165.000	1.2920	1.2690	.8533	.3936	.0546	-.0130	-.1003	-.0770	-.0206	.4373	.4554	.2731	.0805	.0362	-.0147
180.000				.3669	.0407	-.0284	-.1079	-.0980	-.0171	.4089	.4776	.2563	-.0815	.0704	-.1087
270.000			.9043												

X/LT .7460 .8530 .9280

PMI

.000	.0001	-.0237	-.0124
30.000	-.0286	-.0309	.0325
60.000	-.0336	-.0150	.1666
90.000	-.0617	.0231	
120.000	-.0622	.0312	.1261
135.000	-.0622	.0106	.0332
150.000	-.1201	-.0323	.0168
165.000	-.0892	-.0281	-.0786
180.000	-.1231	-.0634	-.1219

ALPHAT (1) = -8.440 BETAT (3) = -.010

DEPENDENT VARIABLE CP

SECTION (1) EXTERNAL TANK

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
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PMI

.000	1.3100	.8552	.4807	.0370	-.2058	-.2523	-.3025	-.2764	-.1482	.0973	.0323	-.1214	-.2241	-.1331	.0103
30.000			.4721	.0906	-.2003	-.2473	-.2991	-.2755	-.0632	-.0498	-.1215	-.2051	-.1454	-.1202	-.0333
60.000			.5227	.0952	-.1725	-.2239	-.2911	-.2654	-.0081	-.2711	-.4742	-.3572	-.1165	.0471	-.0813
90.000		1.0130	.6120	.1749	-.1179	-.1744	-.2433	-.2200	.5837	-.3162	-.1766	-.2486	-.1239	-.0932	
120.000			.7240	.2700	-.0455	-.1097	-.1830	-.1689	.2279	.3505	.0276	.2199	.1231	.0614	-.0793
135.000								-.1349		.3445		.1501		.0338	
150.000			.5130	.3382	.0094	-.0361	-.1421	-.1167	.1033	.4790	.1991	.0695	.0048	-.0375	-.1292
165.000				.3697	.0338	-.0291	-.1145	-.0962	-.0324	.5176	.4078	.2667	.0187	.0205	-.0763
180.000	1.3100	1.2750	.8596	.3767	.0429	-.0241	-.1060	-.0847	-.0044	.4021	.4890	.2018	.0990	.0660	-.0374
270.000		1.0110													

X/LT .7460 .8530 .9280

PMI

.000	.0199	-.0126	.0131
30.000	-.0104	-.0186	.0237
60.000	-.0231	-.0145	.1744
90.000	-.0615	.0040	
120.000	-.1246	-.0212	.0166
135.000	-.1391	-.0435	-.0776
150.000	-.1627	-.1021	-.1032



(R81731)

EXTERNAL TANK

ARC11-716 IA14 01+112+512N25

ALPHAT ( 1 ) = -6.440 BETAT ( 3 ) = -.010

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8330 .9280

RMI  
165.000 -.1884 -.0456 -.0700  
180.000 -.1056 -.0352 -.1616

ALPHAT ( 1 ) = -6.550 BETAT ( 4 ) = 4.130

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

RMI  
.000 1.2980 .8418 .4544 .0379 -.2113 -.2570 -.3057 -.2615 -.1576 .0766 -.0033 -.1274 -.2277 -.1412 .0003  
30.000 .4414 .0266 -.2170 -.2616 -.3057 -.2794 -.0242 .0337 -.0448 -.1977 -.1639 -.1242 -.0011  
60.000 .4374 .0365 -.2097 -.2507 -.3116 -.2748 -.0909 -.2348 -.4661 -.2643 -.0687 -.0910 -.0803  
90.000 .9116 .5150 .0903 -.1738 -.2238 -.2882 -.0998 .5494 -.2499 -.2161 -.2723 -.0864 -.0617  
120.000 .6181 .1841 -.1140 -.1698 -.2374 -.2202 .1564 .4462 .1002 .1582 .0754 -.0274 -.1244  
135.000 .7306 .2717 -.0438 -.1000 -.1861 -.1569 .2243 .3661 .1930 -.0186 -.0676 -.0836 -.2240  
165.000 .3385 .0130 -.0529 -.1343 -.1150 -.0401 .3746 .3668 .2160 .0733 .0567 -.0659  
180.000 1.2980 1.2750 .8537 .3794 .0426 -.0229 -.1046 -.0665 .3495 .4460 .1846 .0610 .0368 -.0740  
270.000 1.1170 .5920

X/LT .7460 .8330 .9280

RMI  
.000 -.0069 -.0247 -.0148  
30.000 -.0180 -.0304 .0203  
60.000 -.0279 -.0268 .1756  
90.000 -.0692 -.0579  
120.000 -.1484 -.0932 -.0700  
135.000 -.1595 -.1103 -.1583  
165.000 -.2102 -.1669 -.1946  
180.000 -.1493 -.1032 -.1648  
270.000 -.1453 -.1009 -.2022

(RB1731)

EXTERNAL TANK

ARC11-71.6 1A14 Q1+712+512N25

ALPHAT(1) = -0.580 BETAT(5) = 0.260

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0280	.0480	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2490	.7876	.4192	.1136	-.2307	-.2734	-.3273	-.3066	-.1277	.0478	-.0320	-.1816	-.1862	-.1481	-.0572
30.000			.3812	-.0147	-.2414	-.2827	-.3282	-.2949	-.0243	.0483	-.0513	-.2201	-.2276	-.1149	-.0322
60.000			.3826	-.0186	-.2446	-.2839	-.3345	-.1111	-.0738	-.1951	-.4178	-.2245	-.0812	-.0842	-.0768
90.000		.8098	.4240	.0127	-.2337	-.2741	-.3301	-.0549	.4401	-.1775	-.2636	-.2429	-.1511	-.0842	
120.000			.5179	.0958	-.1773	-.2312	-.2949	-.2276	.0850	.3568	.1957	.0765	.0232	-.0237	-.2008
135.000								-.2447		.1870		.0633		-.0682	
150.000			.6454	.1972	-.0987	-.1546	-.2361	-.2166	.1798	.3185	.1606	-.1086	-.1053	-.2505	-.2913
165.000			.2928	-.0223	-.0859	-.1675	-.1475	.0313	.3088	.2710	.2037	.1218	.0037	-.1453	
180.000	1.2490	1.1820	.8336	.3603	.0279	-.0378	-.1208	-.0446	.1342	.2859	.3821	.1740	.1218	-.0426	-.1215
270.000		1.2090							.6050						

X/LT .7480 .8530 .9280

PMI

.000	-.0238	-.0636	-.0319
30.000	-.0451	-.0655	-.0251
60.000	-.0676	-.0678	.1351
90.000	-.1509	-.2272	
120.000	-.2018	-.1579	-.1205
135.000	-.2184	-.1653	-.1980
150.000	-.2437	-.2045	-.2450
165.000	-.1976	-.1595	-.2064
180.000	-.2226	-.1911	-.2676

ALPHAT(5) = -4.350 BETAT(1) = -0.220

SECTION (1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0280	.0480	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PMI															
.000	1.2980	.9082	.5256	.0995	-.1731	-.2204	-.2801	-.2646	-.2211	.1080	.0035	-.1489	-.1734	-.1614	-.0812
30.000			.6216	.1759	-.1104	-.1710	-.2342	-.2198	-.0478	-.0831	-.3069	-.2283	-.0769	-.0979	-.1304
60.000			.7430	.2813	-.0316	-.0911	-.1755	-.1526	.2056	-.1312	-.3941	-.2487	-.2255	-.0227	.0355
90.000		1.2470	.8411	.3640	.0357	-.0306	-.1147	-.0940	.6349	-.4307	-.2860	-.1725	-.0951	-.0951	-.0238
120.000			.9750	.3927	.0581	-.0100	-.0949	-.0822	.3890	.1123	-.2243	.2702	.2905	.2059	.0418
135.000								-.0841		.1455		.1364		.1940	
150.000			.8452	.3672	.0359	-.0317	-.1190	-.0917	.1446	.2320	.2172	.1133	.1532	.0731	.0277
165.000			.3179	-.0044	-.0702	-.1507	-.1277	-.0960	.3925	.4010	.3011	.0694	-.0429	.0169	
180.000	1.2980	1.1700	.7319	.2715	-.0420	-.1001	-.1705	-.1598	-.0720	.3582	.4060	.2731	-.0884	.0346	-.0828
270.000		.8906							.5472						

X/LT .7480 .8530 .9280

PMI

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01751)

EXTERNAL TANK

ARC11-716 1A14 Q1+T12+S12M25

ALPHAT ( 2 ) = -4.350 BETAT ( 1 ) = -6.220

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .7480 .0330 .9280

PHI

.000 -.0390 -.0574 -.0347  
30.000 -.0705 -.0574 .0283  
60.000 -.0230 -.0019 .1732  
90.000 -.0318 .0241  
120.000 -.0126 .1221 .2018  
135.000 .0100 .0761 .1711  
150.000 -.0300 .0147 .1800  
165.000 -.0670 .0163 .0000  
180.000 -.1391 -.0016 -.0610

ALPHAT ( 2 ) = -4.350 BETAT ( 2 ) = -4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

K/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

.000 1.3490 .9467 .5497 .1083 -.1653 -.2124 -.2715 -.2472 -.1905 .1428 .0630 -.1077 -.1932 -.1339 -.0103  
30.000 .5978 .1539 -.1355 -.1698 -.2494 -.2314 -.0755 -.0223 -.1739 -.1772 -.0726 -.0739 -.0736  
60.000 .6888 .2145 -.0908 -.1468 -.2183 -.1962 .1661 -.1263 .3887 .2411 .1022 .0423 .0068  
90.000 1.1580 .7440 .2766 -.0308 .1033 .1810 .1576 .6237 .4310 .2381 .2258 .0284 .0317  
120.000 .7872 .3176 .0089 .0735 .1535 .1330 .3903 .1416 .1709 .2348 .1553 .1213 .0241  
135.000 .3226 .0255 .0684 .1567 .1213 .0718 .3863 .2324 .1030 .0609 .0059 .0218  
150.000 .3059 .0191 .0913 .1604 .1390 .0752 .3658 .4120 .2728 .0056 .0213 .0116  
165.000 1.3490 1.1810 .7485 .2811 .0330 .0956 .1689 .1553 .4223 .3154 .2148 .1316 .0086 .0167  
180.000 .9521 .6002

K/LT .7480 .0330 .9280

PHI

.000 .0103 -.0137 .0037  
30.000 .0367 .0188 .0614  
60.000 .0079 .0036 .1504  
90.000 .0497 .0545  
120.000 .0741 .0644 .1948  
135.000 .0572 .0144 .1158  
150.000 .1137 .0429 .1266  
165.000 .0888 .0116 .0266  
180.000 .0588 .0333 .1035

DATE 06 JAN 75 TABULATED MEASURE DATA - IAL14 - VOL. 9

ARC11-716 IAL14 ON-TIME-SIGNEES (RB1751)

EXTERNAL TANK

ALPHAT( 2 ) = -4.190 BETAT ( 3 ) = .010

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0060	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.3480	.9452	.5339	.1139	-.1588	-.2090	-.2636	-.2429	-.1819	.1422	.0741	-.0988	-.1854	-.1262	-.0028	
30.000			.5619	.1237	-.1493	-.2015	-.2604	-.2409	-.0474	.0445	-.0708	-.1442	-.1426	-.0843	-.0386	
60.000			.5897	.1472	-.1310	-.1815	-.2524	-.2280	.1186	-.1022	-.3654	-.2595	-.0465	-.0876	-.0655	
90.000		1.0610	.6399	.1907	-.1036	-.1589	-.2317	-.2080	.6193		-.4221	-.1930	-.2816	-.0109	-.0625	
120.000			.6884	.2352	-.0687	-.1267	-.2011	-.1876	.1692	.1963	-.1326	.1791	.0759	.0276	-.0552	
150.000							-.1695			.3268		.0181		.0308		
180.000			.7345	.2671	-.0458	-.1029	-.1857	.1518	.1518	.2684	.2335	-.0087	-.0757	-.0411	-.1278	
210.000				.2799	-.0388	-.0939	-.1742	-.1508	-.0814	.3741	.3446	.1970	-.0498	-.0206	-.0481	
240.000	1.3480	1.1810	.7555	.2826	-.0340	-.0946	-.1712	-.1451	.0142	.3102	.4179	.1688	.0125	.0430	-.0488	
270.000		1.0630						.6151								

K/LT .7480 .8530 .9280

PHI

.000	.0887	.0045	.0169
30.000	-.0001	-.0091	.0385
60.000	.0029	.0045	.1770
90.000	-.0904	.0349	
120.000	-.1216	.0190	.0924
150.000	-.1354	-.0164	-.0105
180.000	-.1896	-.0638	-.0356
210.000	-.0976	-.0445	-.0717
240.000	-.1335	-.0126	-.0760

ALPHAT( 2 ) = -4.320 BETAT ( 4 ) = 4.100

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK		DEPENDENT VARIABLE CP														
K/LT		.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI																
.000	1.3480	.9320	.5463	.1144	-.1630	-.2105	-.2709	-.2510	-.1925	.1244	.0467	-.1049	-.1974	-.1401	-.0139	
30.000			.5210	.0891	-.1778	-.2264	-.2768	-.2562	-.0138	.0312	-.0034	-.1367	-.2298	-.1038	-.0188	
60.000			.5164	.0861	-.1744	-.2237	-.2873	-.2542	.1167	-.0700	-.3207	-.2261	-.0597	-.0365	-.0799	
90.000		.9564	.5431	.1087	-.1605	-.2123	-.2744	-.2454	.6160		-.4219	-.1976	-.2892	-.0432	-.0922	
120.000			.5952	.1586	-.1294	-.1846	-.2503	-.2289	.1048	.2819	-.0575	.1302	.0080	-.0211	-.1072	
150.000							-.2093			.1320		.0388		-.0273		
180.000			.6658	.2093	-.0911	-.1446	-.2247	-.1980	.1840	.2798	.1540	-.1149	-.1680	-.0843	-.1875	
210.000				.2535	-.0550	-.1163	-.1914	-.1709	.0685	.3154	.2934	.1391	.0119	.0147	-.0910	
240.000	1.3480	1.1830	.7479	.2811	-.0320	-.0956	-.1723	-.1327	.0485	.2908	.3852	.1430	-.0055	.0207	-.0838	
270.000		1.1630						.6290								
K/LT			.7480	.8330												

K/LT .7480 .8530 .9280

PHI

.000	.0887	.0045	.0169
30.000	-.0001	-.0091	.0385
60.000	.0029	.0045	.1770
90.000	-.0904	.0349	
120.000	-.1216	.0190	.0924
150.000	-.1354	-.0164	-.0105
180.000	-.1896	-.0638	-.0356
210.000	-.0976	-.0445	-.0717
240.000	-.1335	-.0126	-.0760



DATE 06 JAN 75

TABULATED PRESSURE DATA - IAI4A - VOL. 9

PAGE 3081

(R01731)

EXTERNAL TANK

ARC11-718 IAI4 CL-712+512MS

ALPHAT (2) = -4.320 BETAT (4) = 4.120

SECTION (1) INTERNAL TANK DEPENDENT VARIABLE CP

V/LT .7400 .8330 .9200

PMI

.000	.0048	-.0189	.0050
30.000	.0035	-.0132	.0446
60.000	-.0372	-.0279	.1415
90.000	-.0748	-.0348	
120.000	-.1487	-.0514	-.0152
135.000	-.1586	-.0613	-.1077
150.000	-.2023	-.0798	-.1307
165.000	-.1367	-.0737	-.1395
180.000	-.1456	-.0794	-.1756

ALPHAT (2) = -4.370 BETAT (5) = 0.230

SECTION (1) INTERNAL TANK

DEPENDENT VARIABLE CP

V/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5560	.6360
PMI															
.000	1.2970	.9023	.5176	.0921	-.1788	-.2287	-.2873	-.2721	-.2125	.0720	.0066	-.1331	-.1832	-.1653	-.0816
30.000			.4614	.0401	-.2106	-.2596	-.3059	-.2613	-.0032	.0355	.0378	-.1762	-.2365	-.1276	-.0321
60.000			.4441	.0224	-.2190	-.2605	-.3146	-.2599	.1133	-.0244	-.2644	-.1160	-.0636	-.0997	-.0424
90.000		.8512	.4546	.0351	-.2131	-.2583	-.3111	-.0410	.5134		-.4136	-.2468	-.1688	-.0786	-.0908
120.000			.5018	.0794	-.1645	-.2324	-.2941	-.2523	.0468	.3446	.0131	.0477	-.0556	-.0330	-.1921
135.000			.5053	.1437	-.1404	-.1911	-.2649	-.2401	.1345	.0256		.0155	-.0487		
150.000				.2125	-.0848	-.1468	-.2190	-.2017	.1040	.2310	.0888	-.1700	-.1950	-.1620	-.2832
165.000	1.2970	1.0420	.7297	.2622	-.0476	-.1100	-.1636	-.1222	.0301	.2462	.2267	.1364	.0026	-.0236	-.1778
180.000		1.2500							.0301	.2210	.3263	.1807	-.0369	-.0850	-.1117

V/LT .7400 .8330 .9200

PMI

.000	-.0361	-.0371	-.0313
30.000	-.0148	-.0364	.0021
60.000	-.0475	-.0571	.1389
90.000	-.1909	-.1713	
120.000	-.1813	-.0916	-.0707
135.000	-.2723	-.1105	-.1345
150.000	-.2231	-.1356	-.1598
165.000	-.1913	-.1234	-.1787
180.000	-.2293	-.1642	-.2226

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ARC11-716 JA14 08+112+312M23

(R81731)

ALMAT( 3 ) = -.500 BETAT ( 1 ) = -0.200

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/L	0.000	.0000	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
W/L	0.000	1.3100	.9937	.6061	.1620	-.1245	-.1795	-.2461	-.2289	-.1954	.1246	.0264	-.1131	-.1206	-.1047
W/L	0.000	.7143	.2594	-.0541	-.1156	-.1860	-.1733	.0150	.0110	-.2413	-.1947	-.0493	-.0802	-.0847	-.0847
W/L	0.000	.8114	.3336	.0098	-.0349	-.1408	-.1154	.3062	-.0323	-.2812	-.1912	-.0735	-.0809	-.0214	-.0214
W/L	0.000	1.2090	.8552	.3762	.0418	-.0251	-.1113	-.0910	.6451	-.3605	-.3554	-.1931	-.1690	-.0402	-.0402
W/L	0.000	.8261	.3509	.0217	-.0468	-.1262	-.1164	.3219	.0083	-.2021	-.1240	.2403	.2168	.0658	.0658
W/L	0.000	.7595	.2923	-.0268	-.0901	-.1724	-.1464	.1198	.0566	.1083	.0288	.0511	.0687	.0390	.0390
W/L	0.000	.2316	-.0737	-.1359	-.2093	-.1876	-.1448	.2830	.3713	.2801	.0803	.0420	.0240	.0240	.0240
W/L	0.000	.1880	-.1078	-.1619	-.2263	-.2171	-.1052	.2942	.3485	.2321	-.1534	-.0459	-.0754	-.0754	-.0754
W/L	0.000	.8562						.6310							

W/L 7.400 .8530 .9280

W/L

W/L	0.000	-.0616	-.0574	-.0270											
W/L	0.000	-.0889	-.0352	.0237											
W/L	0.000	.0091	.0263	.1620											
W/L	0.000	-.0159	.0467												
W/L	0.000	.0039	.1637	.3617											
W/L	0.000	.0307	.1512	.3024											
W/L	0.000	-.0210	.0976	.3258											
W/L	0.000	-.0535	.0907	.0918											
W/L	0.000	-.0035	.0681	.0319											

ALMAT( 3 ) = -.970 BETAT ( 2 ) = -4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

W/L	0.000	.0000	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4310	.5030	.5900	.6300
W/L	0.000	1.3390	1.0410	.6545	.1877	-.1132	-.1682	-.2335	-.2138	-.1657	.1770	.0680	-.0794	-.1434	-.1338
W/L	0.000	.6834	.2247	-.0818	-.1416	-.2098	-.1942	-.0390	.0634	-.1117	-.1114	-.0762	-.0334	-.0617	-.0617
W/L	0.000	.7294	.2644	-.0299	-.1130	-.1935	-.1657	.3018	-.0181	-.2746	-.1938	-.0290	-.0376	-.0311	-.0311
W/L	0.000	1.1780	.7325	.2848	.0353	-.0970	-.1733	-.1561	.6298	-.3691	-.3500	-.2033	-.1173	-.0612	-.0612
W/L	0.000	.7416	.2746	-.0416	-.1049	-.1794	-.1634	.2336	.0321	-.1189	-.1365	.1431	.1101	.0088	.0088
W/L	0.000	.7141	.2497	-.0626	-.1222	-.1974	-.1673	.1426	.1426	.0070	.0070	.1048	.1048	.1048	.1048
W/L	0.000	.2218	-.0850	-.1432	-.2114	-.1877	-.0859	.2666	.3242	.2860	.0039	-.0713	-.0114	-.0114	-.0114
W/L	0.000	1.3590	1.0910	.6545	.1979	-.1019	-.1555	-.2221	-.2045	.0742	.2186	.3547	.2127	-.1455	-.1283
W/L	0.000	.9654						.6336							

W/L 7.400 .8530 .9280

W/L



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1731)

EXTERNAL TANK

ARC11-716 \*+4 Q1+T12+S12N25

ALPHAT ( 3 ) = -.570 BETAT ( 2 ) = -4.100

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .7460 .6330 .9280

PHI

.000 -.0006 -.0070 .0089  
 30.000 -.0260 -.0105 .0510  
 60.000 .0031 .0270 .1506  
 90.000 -.0372 .0768  
 120.000 -.0487 .1216 .2779  
 135.000 -.0326 .0864 .1847  
 150.000 -.0795 .0360 .2279  
 165.000 -.0791 .0480 .0153  
 180.000 -.0674 .0328 -.0492

ALPHAT ( 3 ) = -.560 BETAT ( 3 ) = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) EXTERNAL TANK

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2190 .2420 .2900 .3440 .3940 .4510 .5050 .5560 .6380

PHI

.000 1.3790 1.0600 .6417 .1893 -.1054 -.1645 -.2293 -.2095 -.1556 .1808 .1102 -.0650 -.1410 -.1250 -.0248  
 30.000 .6431 .1897 -.1070 -.1634 -.2225 -.2040 -.0267 .0121 .0031 -.0814 -.1456 -.0618 -.0228  
 60.000 .6437 .1897 -.1025 -.1544 -.2282 -.2079 .1490 .0114 -.2459 -.2172 -.0176 -.0153 -.0487  
 90.000 1.0750 .6494 .1992 -.0975 -.1498 -.2223 -.2029 .6322 -.3739 -.3457 -.2188 -.0895 -.0879  
 120.000 .6325 .2027 -.0961 -.1521 -.2159 -.1995 .2335 .0900 -.0777 -.1558 .0740 .0245 -.0248  
 135.000 .6639 .2036 -.0919 -.1489 -.2273 -.1844 .0806 .2735 .2293 -.0731 .0208  
 150.000 .2049 -.0939 -.1498 -.2225 -.1960 .0664 .2890 .2735 .1590 -.0206 -.1350 -.0847 -.0895  
 165.000 .6603 .2047 -.0930 -.1519 -.2207 -.1892 .0296 .2808 .3195 .1599 -.0680 -.0840 -.0407  
 180.000 1.0900 .6803 .2047 -.0930 -.1519 -.2207 -.1892 .0296 .2808 .3195 .1599 -.0680 -.0840 -.0407  
 270.000 1.0800 .6197

X/LT .7460 .6330 .9280

PHI

.000 .0201 .0171 .0429  
 30.000 .0075 .0049 .0355  
 60.000 -.0248 .0045 .1238  
 90.000 -.0354 .0555  
 120.000 -.0674 .0717 .1738  
 135.000 -.0929 .0495 .0678  
 150.000 -.1435 .0020 .0386  
 165.000 -.0817 .0422 -.0202  
 180.000 -.1060 .0347 -.0044

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DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81T51)

EXTERNAL TANK

ARC11-716 1A14 OA+T12+S12N25

ALPHAT ( 3 ) = -.970 BETAT ( 4 ) = 4.110

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI				.1833	-.1050	-.1606	-.2254	-.2108	-.1636	.1685	.0869	-.0702	-.1462	-.1415	-.0420
.000	1.3650	1.0440	.6337	.1833	-.1050	-.1606	-.2254	-.2108	-.1636	.1685	.0869	-.0702	-.1462	-.1415	-.0420
30.000			.5871	.1400	-.1348	-.1902	-.2469	-.2265	-.0216	.0321	.0330	-.0780	-.1932	-.0968	-.0267
60.000			.5803	.1186	-.1454	-.1997	-.2638	-.2363	.0584	.0531	-.1996	-.2252	-.0235	-.0371	-.0168
90.000		.9767	.5336	.1189	-.1494	-.2037	-.2649	-.2391	.6471	.1505	-.3750	-.3065	-.2271	-.1287	-.0985
120.000			.5677	.1311	-.1433	-.1956	-.2558	-.2353	.0967	.1505	-.0241	-.1575	.0191	-.0455	-.0550
135.000								-.2253		.2233		-.0389		-.0567	
150.000			.6079	.1563	-.1257	-.1798	-.2501	-.2145	.1480	.1452	.1404	-.1448	-.2062	-.1411	-.1557
165.000				.1830	-.1056	-.1608	-.2318	-.2095	.1095	.2771	.2535	.1312	-.0277	-.1099	-.0206
180.000	1.3650	1.0950	.6608	.2029	-.0896	-.1464	-.2174	-.1789	.0361	.2309	.3490	.1401	-.0454	-.1053	-.0672
270.000		1.1750						.6382							

X/LT .7460 .8530 .9280

PHI

.000	.0026	-.0053	.0126
30.000	.0046	.0027	.0570
60.000	-.0100	-.0037	.1496
90.000	-.0309	.0127	
120.000	-.1011	.0057	.0584
135.000	-.1057	-.0037	-.0525
150.000	-.1446	-.0348	-.0743
165.000	-.0651	-.0027	-.0880
180.000	-.1061	-.0091	-.1380

ALPHAT ( 3 ) = -.980 BETAT ( 5 ) = 8.220

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI				.1652	-.1201	-.1815	-.2444	-.2316	-.1875	.1172	.0282	-.1115	-.1455	-.1456	-.0957
.000	1.3200	.9991	.6076	.1652	-.1201	-.1815	-.2444	-.2316	-.1875	.1172	.0282	-.1115	-.1455	-.1456	-.0957
30.000			.5213	.0928	-.1746	-.2308	-.2855	-.2633	.0240	-.0198	-.0905	-.1657	-.2310	-.1192	-.0346
60.000			.4775	.0525	-.1996	-.2451	-.3047	-.2723	.0184	.0941	-.1414	-.2201	-.0395	-.0703	-.0268
90.000		.8696	.4653	.0407	-.2030	-.2476	-.3027	-.2725	.6706		-.3673	-.2324	-.2596	-.1383	-.0962
120.000			.4833	.0601	-.1939	-.2401	-.2965	-.2756	-.0225	.1971	.0361	-.1161	-.0459	-.1049	-.1303
135.000								-.2664		.0424		-.0656		-.1199	
150.000			.5336	.0976	-.1714	-.2189	-.2875	-.2600	.0984	.2209	.0593	-.2016	-.2644	-.1692	-.2302
165.000				.1427	-.1362	-.1915	-.2592	-.2411	.1133	.2039	.2124	.1078	-.0550	-.0969	-.1435
180.000	1.3200	1.0070	.6402	.1847	-.1055	-.1617	-.2339	-.1857	.0686	.1691	.2632	.1672	-.1178	-.0452	-.1142
270.000		1.2720						.6590							

X/LT .7460 .8530 .9280

PHI



(RB1T51)

**EXTERNAL TANK**

ARC11-716 1A14 01+T12+S12N25

$$\text{ALPHAT}(3) = -.500 \quad \text{BETAT}(5) = 0.220$$

SECTION ( 1 )EXTERNAL TANK	DEPENDENT VARIABLE CP
1	1
2	2
3	3
4	4
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89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

	X/LT	.7460	.8530	.9280
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III

.000	-.0511	-.0495	-.0227
30,000	-.0135	-.0229	.0111
60,000	-.0234	-.0348	.1959
90,000	-.0635	-.0256	
120,000	-.1317	-.0323	.0012
135,000	-.1499	-.0514	.0822
150,000	-.1771	-.0751	-.1027
165,000	-.1341	-.0710	-.1432
180,000	-.1997	-.0963	-.2043

ALPHAT( 4) = 4.090 BETAT( 1) = -8.230

SECTION ( 1 ) EXTERNAL TANK

DATE	TIME	WAVELENGTH
10/10/70	0000	1.77X

三

	1.3500	1.1050	.7147	.2619	-.0547	-.1137	-.1848	-.1687	-.1385	.0895	.0550	-.0626	-.0898	-.0851	-.0786
30.000			.8239	.3518	.0216	-.0451	-.1214	-.1071	.1252	.1091	-.1422	-.0702	-.0040	.0027	-.0359
60.000			.8782	.3931	.0579	-.0079	-.0991	-.0775	.4319	.0774	-.1839	-.1265	.0396	.0509	.0139
90.000		1.2530	.8474	.3702	.0383	-.0316	-.1157	-.0984	.6364		-.3056	-.2002	-.0397	-.0809	-.1431
120.000			.7480	.2832	-.0328	-.0950	-.1729	-.1584	.2155	-.1310	-.2934	-.3365	.0681	.1600	.1325
135.000								-.1890		-.0854		-.1484		.1094	
150.000			.6483	.1956	-.1005	-.1550	-.2342	-.2085	-.0022	-.0667	.1124	-.0764	-.0786	.0061	.0698
165.000				.1305	-.1477	-.2015	-.2685	-.2489	-.1370	.2036	.2891	.2205	.0228	-.0600	.0475
180.000	1.3000	.9683	.5286	.0980	-.1755	-.2228	-.2808	-.2585	-.0939	.2392	.3188	.2159	-.1766	-.1463	-.0062
270.000		.8441						.6395							

X/LT	.7460	.8530	.9287
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### III

0.000	-0.0826	-0.0490	-0.0293
30.000	-0.0353	.0004	.0156
60.000	0.0030	.0612	.1100
90.000	-1.136	-0.0341	
120.000	0.0757	.2293	.4966
150.000	.1031	.2502	.4182
180.000	0.0598	.2223	.4484
210.000	.0319	.2130	.1530
240.000	.0042	.1701	.0629

(RB1731)

EXTERNAL TANK

ARC11-716 IA14 01-T12+S12N25

ALPHAT ( 4 ) = 4.110 BETAT ( 2 ) = -4.040

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.3480	1.1990	.7447	.2768	-.0356	-.0956	-.1702	-.1576	-.1192	.2284	.1332	-.0241	-.0820	-.0753
30.000				.7874	.3136	-.0099	-.0721	-.1451	-.1292	-.0326	.0902	-.0958	-.0347	-.0382	-.0132
60.000				.7864	.3111	-.0069	-.0696	-.1548	-.1334	.0963	.1098	-.1755	-.1394	.0496	-.0081
90.000		1.1580		.7420	.2793	-.0350	-.1005	-.1777	-.1589	.5172	-.3145	-.2087	-.0011	-.0382	-.0991
120.000				.6877	.2121	-.0892	-.1459	-.2129	-.2001	.1552	-.1137	-.2699	-.3320	-.0071	.0848
150.000								-.2124			-.0012	-.0999		.0239	
180.000				.6089	.1594	-.1269	-.1810	-.2483	-.2231	-.0163	.1198	.1205	-.0737	-.1257	.0122
210.000				.1273	-.1517	-.2045	-.2665	-.2398	.0278	.2106	.3003	.2542	-.0421	-.1220	-.0175
270.000		1.3480	.9733	.5444	.1065	-.1646	-.2122	-.2700	-.2441	.0474	.1806	.3195	.1963	-.0979	-.2065
			.9526												-.0425
X/LT	.7480	.8530	9280												

PHI	.000	-.0279	.0100	.0496											
30.000		-.0100	.0251	.0822											
60.000		-.0068	.0560	.0868											
90.000		-.0794	.0102												
120.000		.0067	.1696	.3970											
150.000		.0312	.1721	.3105											
180.000		-.0013	.1453	.3423											
210.000		.0070	.1587	.0852											
270.000		-.0015	.1353	.0635											

ALPHAT ( 4 ) = 4.110 BETAT ( 3 ) = .040

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI	.000	1.3700	1.1740	.7569	.2844	-.0337	-.0938	-.1708	-.1509	-.1086	.2249	.1569	-.0071	-.0830	-.0757
30.000				.7551	.2691	-.0452	-.1080	-.1776	-.1603	-.0727	.1565	.0323	-.0477	-.0731	-.0182
60.000				.6939	.2291	-.0714	-.1308	-.2035	-.1834	.2273	.1413	-.1842	-.1079	.0180	.0009
90.000		1.0590		.6393	.1866	-.1043	-.1597	-.2260	-.2093	.6096	-.3583	-.2331	-.0039	-.0462	-.0733
120.000				.5883	.1454	-.1335	-.1852	-.2468	-.2294	.1176	-.0510	-.2437	-.2679	-.0005	.0178
150.000								-.2322			.1153		-.1499		-.0175
180.000				.5679	.1242	-.1490	-.1985	-.2692	-.2269	.0859	.1268	-.0768	-.1827	-.1306	-.0127
210.000				.1203	-.1569	-.2067	-.2703	-.2443	.1084	.2000	.2864	.1514	-.0365	-.1540	.0159
270.000		1.3700	.9749	.5526	.1149	-.1554	-.2098	-.2715	-.2345	.0542	.1925	.3142	.1562	-.0667	-.2807
			1.0790												.0343
X/LT	.7480	.8530	9280												

PHI



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(RB1731)

EXTERNAL TANK

ARC1:-716 1A14 01-112+S12N25

ALPHAT( 4) = 4.110 BETAT( 3) = .040

SECTION ( 1) EXTERNAL TANK

X/LT .7460 .8530 .9280

PHI

.000 -.0047 .0276 .0401  
 30.000 .0033 .0282 .0808  
 60.000 -.0022 .0360 .1432  
 90.000 -.0462 .0637  
 120.000 -.0261 .1354 .2127  
 135.000 -.0199 .1275 .1329  
 150.000 -.0571 .0902 .1199  
 165.000 -.0136 .1151 .0204  
 180.000 .0136 .1113 .0122

ALPHAT( 4) = 4.090 BETAT( 4) = 4.170

SECTION ( 1) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT

.0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5580 .6380

PHI

1.3490 1.1300 .7459 .2807 -.0399 -.0962 -.1721 -.1549 -.1140 .1744 .1312 -.0255 -.0911 -.0896 -.0164  
 30.000 .6712 .2123 -.0855 -.1445 -.2068 -.1944 -.1309 .1433 .0543 -.0764 -.1221 -.0677 -.0300  
 60.000 .5971 .1525 -.1307 -.1834 -.2527 -.2159 .1774 .1639 -.1416 -.1165 .0005 -.0306 -.0378  
 90.000 .9570 .5431 .1093 -.1603 -.2114 -.2710 -.2468 .6142 -.3456 -.1851 .0154 -.0656 -.0707  
 120.000 .5163 .0865 -.1754 -.2218 -.2795 -.2523 .1165 -.0015 -.1804 -.2316 -.0235 -.0562 -.0181  
 135.000 .5240 .0886 -.1727 -.2518 -.2863 -.2468 .0940 .1765 .1405 -.1503 -.2464 -.1891 -.0799  
 150.000 .1020 -.1686 -.2152 -.2767 -.2519 .0365 .2256 .2202 .0956 -.0815 -.1914 .0351  
 165.000 .5527 .1132 -.1592 -.2114 -.2708 -.2315 .0362 .1692 .3068 .1587 -.0843 -.1797 -.0073  
 180.000 1.1690 .6228

X/LT .7460 .8530 .9280

PHI

.000 -.0183 .0040 .0414  
 30.000 -.0093 .0085 .0629  
 60.000 -.0075 .0087 .1362  
 90.000 -.0321 .0414  
 120.000 -.0293 .0744 .0873  
 135.000 -.0296 .0652 -.0131  
 150.000 -.0696 .0353 -.0314  
 165.000 -.0171 .0627 -.0563  
 180.000 -.0300 .0656 -.1087

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(RB1731)

EXTERNAL TANK

ARC11-716 1A14 OA+T12+S12N25

ALPHAT( 4) = 4.080 BETAT ( 5) = 0.280

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.3010	1.1070	.7165	.2633	-.0493	-.1126	-.1843	-.1726	-.1422	.1046	.0531	-.0656	-.0939	-.1055	-.0756
30.000			.5919	.1561	-.1334	-.1874	-.2512	-.2367	-.0419	.1058	-.0582	-.1178	-.1461	-.1030	-.0636
60.000			.5913	.0727	-.1832	-.2334	-.2987	-.2756	.0292	.2280	-.0728	-.1304	-.0313	-.0350	-.0482
90.000		.8908	.4533	.0338	-.2073	-.2548	-.3111	-.2326	.6339		-.3291	-.1127	.0547	-.0767	-.0478
120.000			.4419	.0256	-.2172	-.2584	-.3118	-.2834	.0457	.0654	-.1129	-.1987	-.0354	-.1019	-.0719
135.000								-.2804		.1302		-.1076		-.1223	
150.000			.4658	.0395	-.2086	-.2541	-.3157	-.2774	.0610	.0781	.0827	-.1987	-.2958	-.1841	-.1881
165.000				.0652	-.1926	-.2406	-.3038	-.2797	.0654	.1790	.1936	.0743	-.1014	-.1311	-.0914
180.000	1.3010	.8937	.5287	.0921	-.1719	-.2237	-.2896	-.2468	.0243	.1411	.2020	.1090	-.1990	-.0937	-.0994
270.000	1.2550								.6414						

X/LT .7460 .8530 .9280

PHI

.000	-.0797	-.0435	-.0180
30.000	-.0292	-.0183	.0287
60.000	-.0333	-.0178	.1715
90.000	-.0742	.0202	
120.000	-.0537	.0399	.0491
135.000	-.0650	.0321	-.0377
150.000	-.1168	.0012	-.0666
165.000	-.0340	.0155	-.1037
180.000	-.0868	.0037	-.1523

ALPHAT( 5) = 0.150 BETAT ( 1) = -0.220

## SECTION ( 1) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2530	1.1900	.8127	.3486	.0187	-.0457	-.1231	-.1077	-.0823	.0701	.0943	-.0040	-.0243	-.0226	-.0264
30.000			.9204	.4411	.0955	.0226	-.0597	-.0389	.2365	.1801	-.0541	-.0002	.0492	.0453	.0305
60.000			.9229	.4422	.0987	.0307	-.0661	-.0421	.4731	.1790	-.1609	-.0197	.0644	.0793	.0391
90.000		1.2040	.8182	.3543	.0279	-.0403	-.1244	-.0983	.6011		-.2937	-.1253	-.0198	.0582	.1173
120.000			.6617	.2187	-.0805	-.1404	-.2151	-.2011	.0754	-.2801	-.3156	-.2363	-.0484	.0717	.1219
135.000								-.2447		-.2218		-.2575		.1045	
150.000			.5393	.1139	-.1623	-.2137	-.2871	-.2678	-.0966	-.2043	-.0027	-.0954	-.0946	.0089	.0774
165.000				.0494	-.2081	-.2543	-.3172	-.2918	-.0747	.1443	.1893	.1621	-.0065	-.0411	.0509
180.000	1.2530	.8564	.4350	.0255	-.2257	-.2687	-.3222	-.2801	-.0313	.1477	.2675	.1334	-.1874	-.1279	.0197
270.000	.8002								.5290						

X/LT .7460 .8530 .9280

PHI

.000			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(RB1751)

EXTERNAL TANK

ARC11-716 1A14 OL+T12+S12N25

ALPHAT ( 5 ) = 8.150 BETAT ( 1 ) = -0.220

SECTION ( 1 ) EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT .7460 .8530 .9280

PMI

.000 -.0490 -.0463 -.0019  
 30.000 .0186 .0440 .0656  
 60.000 .0323 .1210 .1554  
 90.000 .1032 .1593  
 120.000 .1046 .2869 .4097  
 135.000 .1485 .2876 .3692  
 150.000 .1074 .2455 .4395  
 165.000 .0942 .2272 .1479  
 180.000 .0774 .1904 .0480

ALPHAT ( 5 ) = 8.170 BETAT ( 2 ) = -4.100

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4310 .5030 .5580 .6380

PMI

.000 1.3020 1.2450 .8479 .3636 .0371 -.0297 -.1102 -.0952 -.0662 .2518 .1784 .0339 -.0173 -.0049 .0131  
 30.000 .8776 .3945 .0388 -.0146 -.0903 -.0746 -.0069 .2171 .0492 -.0032 .0336 .0320 .0329  
 60.000 .8265 .3504 .0215 -.0433 -.1298 -.1087 .3864 .1961 -.1890 -.0253 .0860 .0640 .0313  
 90.000 1.1090 .7140 .2594 -.0506 -.1149 -.1886 -.1746 .5892 .2912 -.0885 .0114 .0313 .0480  
 120.000 .5677 .1504 .1327 -.1879 -.2545 -.2386 .0441 -.2840 -.3154 -.2594 -.0252 .0497 .0641  
 135.000 .5085 .0800 -.1817 -.2329 -.2962 -.2702 -.0584 -.1696 -.2218 .0241  
 150.000 .0464 -.2045 -.2321 -.3097 -.2753 -.0116 .1798 .2797 .2074 -.0912 -.1038 .0328  
 165.000 1.3020 .6633 .4515 .0319 -.2154 -.2594 -.3115 -.2622 -.0026 .1585 .2909 .1442 -.1257 -.2134 .0500  
 180.000 .9105

X/LT .7460 .8530 .9280

PMI

.000 -.0155 .0121 .0615  
 30.000 .0137 .0442 .0932  
 60.000 .0075 .0808 .1224  
 90.000 .0183 .0977  
 120.000 .0500 .2393 .3495  
 135.000 .0698 .2334 .2932  
 150.000 .0476 .1972 .3474  
 165.000 .0651 .2032 .0882  
 180.000 .0767 .1784 .0599

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ARC11-716 1A14 CR+T12+S12M25 (RB1751)

ALPHAT ( 5 ) = 8.160 BETAT ( 3 ) = .010

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.3210	1.2580	.8587	.3727	.0411	-.0261	-.1086	-.0920	-.0556	.2415	.2227	.0345	-.0196	-.0131	.0271
30.000			.8143	.3406	.0166	-.0498	-.1275	-.1071	-.0707	.2153	.1236	-.0012	-.0161	-.0066	.0104
60.000			.7206	.2623	-.0476	-.1048	-.1843	-.1512	.3431	.2260	-.1824	-.0355	.0362	.0330	.0037
90.000	1.0090		.6094	.1703	-.1157	-.1694	-.2412	-.2065	.5743		-.2879	-.2134	.0443	.0202	.0223
120.000			.5224	.0959	-.1729	-.2210	-.2782	-.2642	.0301	-.2433	-.2950	-.2700	-.0379	.0182	.0472
135.000							-.2662			-.0085		-.1869		-.0176	
150.000			.4838	.0568	-.1963	-.2445	-.3013	-.2614	.0825	.1203	.1068	-.1687	-.2084	-.1070	.0242
165.000				.0488	-.2051	-.2528	-.3086	-.2724	.0686	.1478	.2598	.1146	-.0529	-.1407	.0469
180.000	1.3210	.8621	.4609	.0450	-.2051	-.2532	-.3065	-.2553	.0518	.1455	.3202	.1516	-.0832	-.2885	.0492
270.000	1.0200								.5927						

X/LT .7480 .8530 .9280

PHI

.000	.0071	.0279	.0749
30.000	.0061	.0423	.1014
60.000	.0036	.0649	.1603
90.000	.0201	.1270	
120.000	.0343	.1740	.1735
135.000	.0396	.1652	.1267
150.000	.0133	.1275	.1283
165.000	.0647	.1542	.0461
180.000	.0615	.1521	.0344

ALPHAT ( 5 ) = 8.160 BETAT ( 4 ) = 4.200

## SECTION ( 1 ) EXTERNAL TANK

## DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4310	.5030	.5580	.6380
PHI															
.000	1.3030	1.2410	.8451	.3693	.0369	-.0304	-.1098	-.0921	-.0594	.1991	.1742	.0343	-.0265	-.0161	.0092
30.000			.7430	.2831	-.0306	-.0958	-.1646	-.1515	-.1129	.2210	.1045	-.0244	-.0454	-.0424	-.0208
60.000			.6198	.1805	-.1141	-.1693	-.2423	-.2199	.1551	.2785	-.1086	-.0009	.0078	-.0069	-.0197
90.000	.9086		.5143	.0927	-.1727	-.2299	-.2851	-.2149	.5758		-.3056	-.2832	-.0002	-.0119	.0083
120.000			.4585	.0419	-.2038	-.2492	-.3086	-.2842	.0174	-.1729	-.2939	-.2535	-.0348	-.0153	.0264
135.000							-.2771			.0615		-.1761		-.0571	
150.000			.4510	.0266	-.2113	-.2532	-.3143	-.2697	.0615	.1697	.1038	-.1641	-.2438	-.1181	-.0199
165.000				.0337	-.2135	-.2532	-.3120	-.2780	.0571	.2198	.2057	.0551	-.1401	-.1287	.0737
180.000	1.3030	.8637	.4598	.0400	-.2061	-.2517	-.3093	-.2796	.0281	.1343	.3065	.1510	-.0864	-.1718	.0485
270.000	1.1270								.5938						

X/LT .7480 .8530 .9280

PHI

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TABULATED PRESSURE DATA - IA14A - VOL. 9

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(R01751)

EXTERNAL TANK

ARC11-716 IA14 OR+712+512N25

ALPHAT ( S ) = 0.100 BETAT ( A ) = 4.200

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .7400 .8530 .9280

PHI

.000	-.0066	.0050	.0597
30.000	-.0270	.0055	.0609
60.000	-.0055	.0341	.1751
90.000	.0138	.1071	
120.000	.0324	.1251	.0871
135.000	.0331	.1121	.0055
150.000	-.0117	.0744	-.0371
165.000	.0517	.1065	-.0535
180.000	.0451	.1144	-.1105

ALPHAT ( S ) = 0.150 BETAT ( S ) = 0.400

SECTION ( 1 ) EXTERNAL TANK

DEPENDENT VARIABLE CP

X/LT .0000 .0080 .0490 .1130 .1780 .1940 .2150 .2420 .2900 .3440 .3940 .4510 .5050 .5590 .6360

PHI

.000	1.2570	1.1940	.8214	.3546	.0276	-.0411	-.1194	-.1070	-.0755	.0480	.0759	-.0004	-.0270	-.0336	-.0212
30.000			.6153	.2159	-.0870	-.1472	-.2118	-.2030	-.1757	.2095	.0939	-.0394	-.0640	-.0677	-.0666
60.000			.5118	.0894	-.1791	-.2264	-.2994	-.2708	.1400	.2478	-.0306	.0182	-.0447	-.0536	-.0510
90.000		.8021	.4218	.0174	-.2281	-.2731	-.3298	-.0772	.4731		-.3040	-.3035	-.0390	-.0916	-.0462
120.000			.3832	-.0119	-.2396	-.2792	-.3284	-.2883	.0359	-.0968	-.2849	-.2043	-.0603	-.0600	-.0322
135.000								-.2894		.1216		-.1723		-.0776	
150.000			.3673	-.0119	-.2371	-.2768	-.3330	-.2876	.0314	.1575	.0683	-.2129	-.2808	-.1228	-.1234
165.000				.0035	-.2337	-.2749	-.3334	-.3012	.0353	.1448	.1792	.0335	-.1434	-.0783	-.0399
180.000	1.2570	.7692	.4331	.0190	-.2218	-.2686	-.3279	-.3114	.0070	.1035	.1393	.0510	-.1821	-.0753	-.0672
270.000		1.2180							.6121						

X/LT .7400 .8530 .9280

PHI

.000	-.0477	-.0906	.0063
30.000	-.0792	-.0406	.0349
60.000	-.0172	.0050	.1467
90.000	-.0399	.0637	
120.000	-.0030	.0792	.0592
135.000	-.0113	.0744	-.0277
150.000	-.0561	.0332	-.0721
165.000	.0002	.0544	-.0808
180.000	-.0293	.0468	-.1544

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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 CL+712+S12N23+AT10 SRM NOZZLE

(R81X24) ( 28 SEP 75 )

## REFERENCE DATA

SRP = 2.4210 30. FT. XMRP = 29.5800 INCHES  
 LREF = 30.7090 INCHES YMRP = .0000 INCHES  
 BRP = 30.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

MACH ( 1 ) = .902 BETAO ( 1 ) = -9.890

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/LS .9480 .9790 .9930

PMI

.000 -.4411 -.4411 -.4469  
 45.000 -.4401 -.4404 -.4554  
 90.000 -.4374 -.4579 -.4785  
 135.000 -.4474 -.4542 -.4865  
 180.000 -.4667 -.4650 -.4750  
 225.000 -.4579 -.4589 -.4808  
 270.000 -.4512 -.4750 -.4523  
 315.000 -.4411 -.4594 -.3583

MACH ( 1 ) = .899 BETAO ( 2 ) = 10.090

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE C<sub>D</sub>

M/LS .9480 .9790 .9930

PMI

.000 -.2887 -.2992 -.3182  
 45.000 -.2877 -.2999 -.3192  
 90.000 -.3029 -.2967 -.3117  
 135.000 -.2947 -.2994 -.3022  
 180.000 -.2884 -.2949 -.2939  
 225.000 -.2882 -.3007 -.2762  
 270.000 -.2877 -.2987 -.3013  
 315.000 -.2919 -.2999 -.3003

## PARAMETRIC DATA

ALPHA = -10.000 ELEVON = .000  
 RUDDER = .000 SPOBRK = .000



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE (R81423) ( 28 SEP 73 )

PARAMETRIC DATA

ALPMAO = -8.000 ELEVON = .000  
RUDDER = .000 SPOONK = .000

REFERENCE DATA

SRP = 8.4210 30. FT. XMR = 29.9800 INCHES  
LREF = 30.7090 INCHES YMRP = .0000 INCHES  
BREF = 30.7090 INCHES ZMR = .0000 INCHES  
SCALE = .0300 SCALE

MACH ( 1 ) = .899 BETAO ( 1 ) = -9.930

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI  
.000 -.4289 -.4294 -.4369  
45.000 -.4239 -.4336 -.4436  
90.000 -.4246 -.4342 -.4621  
135.000 -.4256 -.4509 -.4653  
180.000 -.4468 -.4499 -.4623  
225.000 -.4513 -.4441 -.4506  
270.000 -.4301 -.4486 -.4392  
315.000 -.4236 -.4344 -.3642

MACH ( 1 ) = .898 BETAO ( 2 ) = 10.098

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI  
.000 -.2972 -.3127 -.3226  
45.000 -.2894 -.3142 -.3286  
90.000 -.3015 -.3068 -.3191  
135.000 -.3007 -.3031 -.3053  
180.000 -.2935 -.2970 -.3033  
225.000 -.2970 -.2950 -.2916  
270.000 -.2947 -.2968 -.3015  
315.000 -.3042 -.3000 -.3032

(R81X26) ( 20 SEP 73 )

ARC11-716 1A14 CR+T12+S12M25+AT10 SRM NOZZLE

PARAMETRIC DATA

ALPHA0 = -6.000 ELEVON = .000  
RUDDER = .000 SPOBRK = .000

REFERENCE DATA

SREF = 2.4210 50.FT. WARP = 29.5600 INCHES  
LREF = 36.7090 INCHES YWAP = .0000 INCHES  
BREF = 36.7090 INCHES ZWAP = .0000 INCHES  
SCALE = .0000 SCALE

MACH ( 1 ) = .897 BETAO ( 1 ) = -9.940

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L3 .9480 .9790 .9930

PMI  
.000 -.4203 -.4365 -.4329  
45.000 -.4224 -.4298 -.4454  
90.000 -.4126 -.4376 -.4653  
135.000 -.4233 -.4481 -.4628  
180.000 -.4370 -.4444 -.4353  
225.000 -.4273 -.4404 -.4420  
270.000 -.4208 -.4414 -.4082  
315.000 -.4156 -.4384 -.4075

MACH ( 1 ) = .898 BETAO ( 2 ) = 10.070

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L3 .9480 .9790 .9930

PMI  
.000 -.3081 -.3146 -.3333  
45.000 -.2949 -.3193 -.3385  
90.000 -.2984 -.3101 -.3255  
135.000 -.3118 -.3049 -.3071  
180.000 -.2994 -.2937 -.3022  
225.000 -.3019 -.2897 -.2980  
270.000 -.2976 -.3066 -.3020  
315.000 -.3156 -.3124 -.3142



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TABULATED PRESSURE DATA - JAI4A - VOL. 9

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ARC11-716 JAI4 06+T12+512N25+AT10 SRM NOZZLE

(R81X27) ( 20 SEP 75 )

# REFERENCE DATA

SRP = 2.4210 50.FT. YMRP = 29.5800 INCHES  
 LREF = 30.7090 INCHES YMRP = .0000 INCHES  
 BRP = 30.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

# PARAMETRIC DATA

ALPHA = -4.000 ELEVON = 000  
 RUDDER = .000 SPDRBK = 300

MACH ( 1 ) = .899 BETA ( 1 ) = -9.990

# DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/LS .9400 .9790 .9930

PHI

.0000 -.4290 -.4340 -.4443  
 45.000 -.4277 -.4342 -.4547  
 90.000 -.4220 -.4375 -.4907  
 135.000 -.4205 -.4393 -.4667  
 180.000 -.4307 -.4515 -.4510  
 225.000 -.4327 -.4393 -.4517  
 270.000 -.4245 -.4355 -.4024  
 315.000 -.4205 -.4440 -.4340

(R01X09) (20 SEP 75)

ARC11-71.6 T-14 Q-712-512-5-AT10 SRM NOZZLE

PARAMETRIC DATA

ALPHA0 = .000 ELEVON = .000  
RUDDER = .000 SPOONK = .000

REFERENCE DATA

REF = 2.4210 20.0 FT. SRP = 29.9000 INCHES  
LREF = 30.7090 INCHES YMRP = .0000 INCHES  
REF = 30.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

MACN ( 1 ) = 1.246 BETAO ( 1 ) = -10.060

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

W/LB .9400 .9790 .9930

PHI  
.000 -.4296 -.4435 -.4536  
45.000 -.4307 -.4447 -.4531  
90.000 -.4392 -.4403 -.4492  
135.000 -.4372 -.4411 -.4453  
180.000 -.4419 -.4369 -.4350  
225.000 -.4413 -.4445 -.4363  
270.000 -.4497 -.4525 -.4284  
315.000 -.4473 -.4502 -.4474

MACN ( 2 ) = 1.843 BETAO ( 2 ) = -7.960

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

W/LB .9400 .9790 .9930

PHI  
.000 -.4201 -.4256 -.4334  
45.000 -.4100 -.4246 -.4363  
90.000 -.4105 -.4201 -.4311  
135.000 -.4105 -.4175 -.4237  
180.000 -.4106 -.4143 -.4140  
225.000 -.4155 -.4201 -.4153  
270.000 -.4225 -.4329 -.4314  
315.000 -.4271 -.4410 -.4445

MACN ( 3 ) = 1.246 BETAO ( 3 ) = -6.020

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

W/LB .9400 .9790 .9930

PHI  
.000 -.4219 -.4313 -.4334  
45.000 -.4214 -.4292 -.4423  
90.000 -.4214 -.4284 -.4366  
135.000 -.4211 -.4269 -.4311  
180.000 -.4211 -.4214 -.4196  
225.000 -.4229 -.4267 -.4313



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X28)

ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE

MACH ( 1 ) = 1.246 BETAO ( 3 ) = -5.720

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

270.000 -.4232 -.4295 -.2630  
315.000 -.4303 -.4546 -.4532

MACH ( 1 ) = 1.247 BETAO ( 4 ) = -3.950

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4091 -.4098 -.4087  
45.000 -.3978 -.4083 -.4197  
90.000 -.4009 -.4090 -.4167  
135.000 -.4012 -.4090 -.4145  
180.000 -.4023 -.4090 -.4008  
225.000 -.4051 -.4231 -.4203  
270.000 -.4007 -.4036 -.2260  
315.000 -.4077 -.4354 -.4367

MACH ( 1 ) = 1.246 BETAO ( 5 ) = -2.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4209 -.4280 -.4343  
45.000 -.4206 -.4269 -.4346  
90.000 -.4198 -.4241 -.4356  
135.000 -.4204 -.4210 -.4288  
180.000 -.4206 -.4236 -.4177  
225.000 -.4222 -.4238 -.4195  
270.000 -.4240 -.4348 -.3339  
315.000 -.4301 -.4359 -.4369

DATE 06 JUN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1X28)

ARC11-71.6 IA14 OL+T12+S12N25+AT10 SRM NOZZLE

MACH (1) = 1.246 BETAO (0) = .010

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3	.9400	.9790	.9930
PMI			
.000	-.3903	-.4028	-.4103
49.000	-.3918	-.4075	-.4184
90.000	-.3988	-.4051	-.4130
139.000	-.3999	-.3998	-.4085
180.000	-.3981	-.4009	-.3947
229.000	-.4028	-.4032	-.4007
270.000	-.4012	-.4147	-.3253
319.000	-.4054	-.4066	-.4116



DATE 06 JUN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9  
ARC11-716 1A14 01+T12+S12N23+AT10 SRM NOZZLE

(R81X29) ( 28 SEP 75 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
LREF = 38.7090 INCHES YMRP = .0000 INCHES  
BREF = 38.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA0 = -10.000 ELEVON = .000  
RUDDER = .000 SPDRK = .000

MACH ( 1 ) = 1.245 BETA0 ( 1 ) = .030

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
.0000 -.4137 -.4237 -.4273  
45.0000 -.4223 -.4297 -.4404  
90.0000 -.4216 -.4333 -.4532  
135.0000 -.4223 -.4292 -.4394  
180.0000 -.4263 -.4271 -.4189  
225.0000 -.4242 -.4339 -.4282  
270.0000 -.4192 -.4299 -.4293  
315.0000 -.4237 -.4299 -.4295



(RB1X31) ( 06 FEB 74 )

ARC11-716 1A14 OL+T12+S12N25+AT10 SRM NOZZLE

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES  
 LREF = 38.7090 INCHES YMRP = .0000 INCHES  
 BREF = 38.7090 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHA( 1 ) = -10.140 BETA( 1 ) = -8.370

## SECTION ( 1 ) SRM NOZZLE

## DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930  
 PHI  
 .000 -.4371 -.4322 -.4467  
 45.000 -.4355 -.4393 -.4427  
 90.000 -.4348 -.4549 -.4721  
 135.000 -.4399 -.4622 -.4780  
 180.000 -.4528 -.4655 -.4595  
 225.000 -.4518 -.4627 -.4505  
 270.000 -.4399 -.4610 -.4326  
 315.000 -.4340 -.4419 -.3778

ALPHA( 1 ) = -10.130 BETA( 2 ) = -6.560

## SECTION ( 1 ) SRM NOZZLE

## DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930  
 PHI  
 .000 -.4144 -.4205 -.4325  
 45.000 -.4223 -.4348 -.4486  
 90.000 -.4195 -.4435 -.4664  
 135.000 -.4376 -.4506 -.4710  
 180.000 -.4424 -.4534 -.4382  
 225.000 -.4409 -.4511 -.4367  
 270.000 -.4254 -.4465 -.3990  
 315.000 -.4177 -.4328 -.3844

ALPHA( 1 ) = -10.130 BETA( 3 ) = -4.840

## SECTION ( 1 ) SRM NOZZLE

## DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930  
 PHI  
 .000 -.4173 -.4196 -.4222  
 45.000 -.4147 -.4221 -.4466  
 90.000 -.4081 -.4349 -.4713  
 135.000 -.4269 -.4476 -.4647  
 180.000 -.4404 -.4504 -.4345  
 225.000 -.4310 -.4402 -.4362

## PARAMETRIC DATA

MACH = .900 ELEVON = .000  
 RUDDER = .000 SPDRK = .000

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(RB1X31)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 1 ) = -10.130 BETA( 3 ) = -4.840

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

270.000 -.4114 -.4324 -.3721  
315.000 -.4031 -.4166 -.3916

ALPHA( 1 ) = -10.080 BETA( 4 ) = -3.250

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4027 -.4089 -.4127  
45.000 -.3964 -.4142 -.4324  
90.000 -.4029 -.4232 -.4530  
135.000 -.4082 -.4289 -.4350  
180.000 -.4199 -.4357 -.4229  
225.000 -.4164 -.4314 -.4274  
270.000 -.3974 -.4084 -.3265  
315.000 -.3961 -.4154 -.3912

ALPHA( 1 ) = -10.040 BETA( 5 ) = -1.800

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4042 -.4184 -.4189  
45.000 -.4080 -.4242 -.4487  
90.000 -.4032 -.4323 -.4616  
135.000 -.4047 -.4270 -.4485  
180.000 -.4191 -.4303 -.4199  
225.000 -.4057 -.4297 -.4367  
270.000 -.3976 -.3999 -.3305  
315.000 -.4017 -.4214 -.4106

DATE 06 JAN 72 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X31)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(1) = -10.040 BETA(6) = .100

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.4114	-.4099	-.4174
45.000	-.4023	-.4220	-.4465	
90.000	-.3958	-.4220	-.4506	
135.000	-.4099	-.4195	-.4240	
180.000	-.4010	-.4225	-.4313	
225.000	-.3995	-.4142	-.3868	
270.000	-.3952	-.4030	-.3083	
315.000	-.3888	-.4192	-.4313	

ALPHA(1) = -10.040 BETA(7) = 1.810

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.3750	-.3975	-.4038
45.000	-.3821	-.4011	-.4117	
90.000	-.3775	-.3882	-.3983	
135.000	-.3765	-.3869	-.4099	
180.000	-.3831	-.4093	-.4401	
225.000	-.4028	-.3798	-.2090	
270.000	-.3879	-.4107	-.3279	
315.000	-.3765	-.4061	-.3950	

ALPHA(1) = -10.130 BETA(8) = 3.580

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.3775	-.3889	-.4084
45.000	-.3752	-.3780	-.4016	
90.000	-.3752	-.3917	-.4173	
135.000	-.3994	-.3914	-.3942	
180.000	-.3841	-.4028	-.4061	
225.000	-.3739	-.3965	-.3264	
270.000	-.3711	-.3939	-.3520	
315.000	-.3731	-.3830	-.3865	

DATE 08 JAN 75

TABULATED PRESSURE DATA - IAI14A - CL. 9

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(R81X31)

ARC11-716 IAI14 01+112+S12M25+AT10 SRM NOZZLE

ALPHA( 1) = -10.130 BETA( 9) = 5.250

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI

.000	-.3328	-.3577	-.3684
45.000	-.3389	-.3517	-.3746
90.000	-.3341	-.3467	-.3655
135.000	-.3367	-.3467	-.3510
180.000	-.3414	-.3447	-.3512
225.000	-.3434	-.3555	-.3263
270.000	-.3489	-.3572	-.3502
315.000	-.3522	-.3552	-.3605

ALPHA( 1) = -10.120 BETA( 10) = 7.010

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI

.000	-.2943	-.3214	-.3430
45.000	-.3079	-.3184	-.3511
90.000	-.3144	-.3156	-.3171
135.000	-.3114	-.3154	-.3174
180.000	-.3074	-.3066	-.3107
225.000	-.3109	-.3065	-.2981
270.000	-.3091	-.3204	-.3293
315.000	-.3247	-.3207	-.3316

ALPHA( 1) = -10.130 BETA( 11) = 8.780

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI

.000	-.2803	-.2909	-.3851
45.000	-.2801	-.2921	-.3031
90.000	-.2826	-.2941	-.3009
135.000	-.2861	-.2848	-.2903
180.000	-.2848	-.2871	-.2973
225.000	-.2748	-.2953	-.2773
270.000	-.2766	-.2788	-.2931
315.000	-.2876	-.2881	-.2986

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81X51)

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 2 ) = -6.110 BETA( 1 ) = -8.350

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.4040 -.4073 -.4153  
45.000 -.4095 -.4113 -.4271  
90.000 -.4065 -.4251 -.4543  
135.000 -.4128 -.4298 -.4546  
180.000 .4303 -.4356 -.4435  
225.000 -.4253 -.4288 -.4354  
270.000 -.4160 -.4356 -.4132  
315.000 -.4020 -.4173 -.3846

ALPHA( 2 ) = -6.120 BETA( 2 ) = -6.640

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.3940 -.4048 -.4025  
45.000 -.3957 -.4078 -.4198  
90.000 -.3985 -.4148 -.4452  
135.000 -.4040 -.4208 -.4552  
180.000 -.4251 -.4281 -.4395  
225.000 -.4201 -.4279 -.4308  
270.000 -.4048 -.4241 -.3846  
315.000 -.3957 -.4058 -.3745

ALPHA( 2 ) = -6.120 BETA( 3 ) = -4.940

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.3967 -.4032 -.3994  
45.000 -.3949 -.3994 -.4270  
90.000 -.3982 -.4195 -.4568  
135.000 -.4062 -.4222 -.4405  
180.000 -.4272 -.4320 -.4330  
225.000 -.4202 -.4232 -.4317  
270.000 -.3564 -.4094 -.3627  
315.000 -.3902 -.4084 -.3901



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(081131)

ARC11-716 1A14 OR-T12-S12N85+AT1D SRM NOZZLE

ALPHA( 2 ) = -0.130 BETA( 4 ) = -3.270

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PMI  
.000 -.3876 -.4049 -.3962  
45.000 -.3949 -.4057 -.4280  
90.000 -.3936 -.4145 -.4461  
135.000 -.4084 -.4175 -.4333  
180.000 -.4120 -.4117 -.4172  
225.000 -.4014 -.4245 -.4415  
270.000 -.3901 -.3949 -.3202  
315.000 -.3916 -.4084 -.4003

ALPHA( 2 ) = -0.130 BETA( 5 ) = -1.600

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PMI  
.000 -.3986 -.4019 -.4067  
45.000 -.3929 -.4084 -.4424  
90.000 -.3878 -.4167 -.4514  
135.000 -.4049 -.4145 -.4233  
180.000 -.4102 -.4140 -.4179  
225.000 -.4002 -.4598 -.4214  
270.000 -.3944 -.3929 -.3182  
315.000 -.3851 -.4145 -.4136

ALPHA( 2 ) = -0.130 BETA( 6 ) = .010

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PMI  
.000 -.3929 -.3964 -.4034  
45.000 -.3902 -.4054 -.4402  
90.000 -.3879 -.4077 -.4477  
135.000 -.3854 -.4037 -.4220  
180.000 -.3979 -.4154 -.4176  
225.000 -.3947 -.4094 -.3665  
270.000 -.3879 -.3862 -.3291  
315.000 -.3902 -.4062 -.4131

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(R81X31)

ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 2 ) = -8.120 BETA( 7 ) = 1.700

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI			
.000	-.3248	-.3771	-.3406
45.000	-.3596	-.3939	-.4081
90.000	-.3623	-.3718	-.3961
135.000	-.3691	-.3720	-.3771
180.000	-.3738	-.4394	-.4434
225.000	-.3934	-.3026	-.1902
270.000	-.3751	-.3991	-.3232
315.000	-.3611	-.3708	-.3805

ALPHA( 7 ) = -8.110 BETA( 8 ) = 3.340

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI			
.000	-.3285	-.3428	-.3496
45.000	-.3270	-.3556	-.3493
90.000	-.3361	-.3396	-.3801
135.000	-.3418	-.3461	-.3506
180.000	-.3421	-.3428	-.3509
225.000	-.3405	-.3473	-.3047
270.000	-.3275	-.3438	-.3092
315.000	-.3305	-.3301	-.3498

ALPHA( 2 ) = -8.090 BETA( 9 ) = 4.950

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI			
.000	-.3110	-.3225	-.3467
45.000	-.3030	-.3100	-.3370
90.000	-.3000	-.3102	-.3370
135.000	-.3085	-.3152	-.3300
180.000	-.3003	-.3107	-.3221
225.000	-.2990	-.3120	-.2973
270.000	-.3055	-.3325	-.3108
315.000	-.3225	-.3227	-.3254

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(R81X31)

ARC11-716 1A14 Q1+T12+SIEN25+AT10 SRM NOZZLE

ALPHA( 2 ) = -8.080 BETA( 10 ) = 6.750

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 0.9480 0.9790 0.9930

PHI	0.000	-0.2897	-0.3103	-0.3316
45.000	-0.2920	-0.3143	-0.3330	
90.000	-0.2885	-0.3032	-0.3073	
135.000	-0.2925	-0.2975	-0.2955	
180.000	-0.2922	-0.2897	-0.2942	
225.000	-0.2922	-0.2910	-0.2879	
270.000	-0.2967	-0.3035	-0.3097	
315.000	-0.3090	-0.3088	-0.3140	

ALPHA( 2 ) = -8.080 BETA( 11 ) = 8.570

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 0.9480 0.9790 0.9930

PHI	0.000	-0.2841	-0.3071	-0.3299
45.000	-0.2921	-0.3086	-0.3189	
90.000	-0.2991	-0.3054	-0.3061	
135.000	-0.3008	-0.2976	-0.2939	
180.000	-0.2909	-0.2944	-0.2955	
225.000	-0.2934	-0.2871	-0.2922	
270.000	-0.2929	-0.2901	-0.2975	
315.000	-0.2946	-0.2984	-0.3087	

ALPHA( 3 ) = -6.100 BETA( 1 ) = -8.140

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 0.9480 0.9790 0.9930

PHI	0.000	-0.3998	-0.4025	-0.4043
45.000	-0.3995 <td>-0.4180</td> <td>-0.4190</td> <td></td>	-0.4180	-0.4190	
90.000	-0.3973 <td>-0.4143</td> <td>-0.4331</td> <td></td>	-0.4143	-0.4331	
135.000	-0.3903 <td>-0.4193</td> <td>-0.4336</td> <td></td>	-0.4193	-0.4336	
180.000	-0.4155 <td>-0.4240</td> <td>-0.4263</td> <td></td>	-0.4240	-0.4263	
225.000	-0.4098 <td>-0.4195</td> <td>-0.4231</td> <td></td>	-0.4195	-0.4231	
270.000	-0.3990 <td>-0.4228</td> <td>-0.3956</td> <td></td>	-0.4228	-0.3956	
315.000	-0.3920 <td>-0.4053</td> <td>-0.3930</td> <td></td>	-0.4053	-0.3930	



(R81X31)

ARCL: -716 1A14 QX+Y12+SIZE5+AT10 SRM NOZZLE

ALPHA0( 3) = -6.110 BETAO( 2) = -6.480

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI			
.000	-.3911	-.3936	-.3946
45.000	-.3971	-.3999	-.4066
90.000	-.3984	-.3994	-.4354
135.000	-.4006	-.4176	-.4482
180.000	-.4184	-.4196	-.4249
225.000	-.4101	-.4129	-.4161
270.000	-.3936	-.4171	-.3702
315.000	-.3816	-.3981	-.3845

ALPHA0( 3) = -6.130 BETAO( 3) = -4.020

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI			
.000	-.3835	-.3940	-.3937
45.000	-.3948	-.4018	-.4178
90.000	-.3845	-.4103	-.4509
135.000	-.3963	-.4196	-.4389
180.000	-.4197	-.4269	-.4279
225.000	-.4084	-.4206	-.4262
270.000	-.3933	-.4116	-.3558
315.000	-.3888	-.4065	-.3852

ALPHA0( 3) = -6.140 BETAO( 4) = -3.220

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI			
.000	-.3799	-.3943	-.4026
45.000	-.3943	-.3963	-.4220
90.000	-.3890	-.4112	-.4504
135.000	-.3973	-.4142	-.4414
180.000	-.4018	-.4162	-.4174
225.000	-.3910	-.4096	-.4320
270.000	-.3897	-.3963	-.3090
315.000	-.3799	-.4016	-.3938



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ARC11-716 1A14 OR-T18-312MESH-ATIO 3RM NOZZLE (RB1X31)

ALPHA( 3 ) = -6.030 BETA( 5 ) = -1.620

SECTION ( 118RM NOZZLE ) DEPENDENT VARIABLE CP

W/L 5 .9400 .9700 .9930

PHI

.000 -.3904 -.3904 -.3903  
45.000 -.3976 -.4099 -.4286  
90.000 -.3901 -.4143 -.4501  
135.000 -.3964 -.4103 -.4376  
180.000 -.4094 -.4133 -.4192  
225.000 -.3982 -.4123 -.4207  
270.000 -.3937 -.3923 -.3210  
315.000 -.3914 -.3933 -.3994

ALPHA( 3 ) = -6.030 BETA( 6 ) = .000

SECTION ( 118RM NOZZLE ) DEPENDENT VARIABLE CP

W/L 5 .9400 .9700 .9930

PHI

.000 -.3756 -.3666 -.3791  
45.000 -.3706 -.3636 -.4073  
90.000 -.3606 -.3631 -.4326  
135.000 -.3713 -.3696 -.3913  
180.000 -.3671 -.3613 -.4038  
225.000 -.3604 -.4086 -.3683  
270.000 -.3743 -.3756 -.3133  
315.000 -.3666 -.3676 -.3926

ALPHA( 3 ) = -6.030 BETA( 7 ) = 1.640

SECTION ( 118RM NOZZLE ) DEPENDENT VARIABLE CP

W/L 5 .9400 .9700 .9930

PHI

.000 -.3334 -.3461 -.3468  
45.000 -.3329 -.3493 -.3682  
90.000 -.3274 -.3446 -.3707  
135.000 -.3371 -.3360 -.3458  
180.000 -.3416 -.4233 -.4261  
225.000 -.3610 -.2901 -.1868  
270.000 -.3411 -.3687 -.2793  
315.000 -.3344 -.2466 -.3319

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X31)

ARC11-716 1A14 0A+T12+S12N2S+AT10 SRM NOZZLE

ALPHA( 3) = -6.180 BETA( 8) = 3.330

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 0.9930

PHI  
 .0000 -.3106 -.3306 -.3385  
 45.0000 -.3130 -.3290 -.3332  
 90.0000 -.3130 -.3312 -.3332  
 135.0000 -.3236 -.3345 -.3422  
 180.0000 -.3256 -.3332 -.3357  
 225.0000 -.3180 -.3405 -.2933  
 270.0000 -.3130 -.3287 -.2784  
 315.0000 -.3163 -.3223 -.3322

ALPHA( 3) = -6.180 BETA( 9) = 5.010

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 0.9930

PHI  
 .0000 -.3071 -.3229 -.3379  
 45.0000 -.3059 -.3166 -.3304  
 90.0000 -.3017 -.3107 -.3314  
 135.0000 -.3076 -.3187 -.3292  
 180.0000 -.3081 -.3087 -.3123  
 225.0000 3031 -.3094 -.3053  
 270.0000 -.3106 -.3217 -.3041  
 315.0000 -.3199 -.3149 -.3228

ALPHA( 3) = -6.180 BETA( 10) = 6.740

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 0.9930

PHI  
 .0000 -.2965 -.3037 -.3320  
 45.0000 -.2855 -.3032 -.3330  
 90.0000 -.2912 -.2975 -.3015  
 135.0000 -.2905 -.3002 -.2945  
 180.0000 -.2871 -.2923 -.2881  
 225.0000 -.2880 -.2860 -.2846  
 270.0000 -.2900 -.3102 -.2996  
 315.0000 -.3052 -.3102 -.3084



(R01X31)

ARC(11-716 1A14 OR-T12+S12M25+AT10 SRM NOZZLE

ALPHA(3) = -6.140 BETA(11) = 8.300

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.2900 -.3036 -.3287  
45.000 -.2020 -.3030 -.3307  
90.000 -.2900 -.2972 -.3132  
135.000 -.2918 -.2925 -.3032  
180.000 -.2900 -.2844 -.2905  
225.000 -.2885 -.2772 -.2860  
270.000 -.2955 -.2899 -.2972  
315.000 -.3085 -.3110 -.3132

ALPHA(4) = -4.170 BETA(1) = -9.980

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.4231 -.4316 -.4403  
45.000 -.4236 -.4326 -.4523  
90.000 -.4142 -.4386 -.4570  
135.000 -.4306 -.4446 -.4665  
180.000 -.4346 -.4496 -.4532  
225.000 -.4251 -.4471 -.4502  
270.000 -.4259 -.4396 -.4115  
315.000 -.4289 -.4421 -.4382

ALPHA(4) = -4.190 BETA(2) = -7.970

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.4070 -.4098 -.4118  
45.000 -.4055 -.4135 -.4283  
90.000 -.3935 -.4180 -.4476  
135.000 -.4100 -.4215 -.4481  
180.000 -.4208 -.4215 -.4311  
225.000 -.4155 -.4170 -.4242  
270.000 -.3977 -.4198 -.3690  
315.000 -.3960 -.4173 -.4053

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DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81X31)

ARC11-716 IA14 OX-T12-S12N25+AT10 SRM NOZZLE

ALPHA( 4 ) = -4.210 BETA( 3 ) = -5.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	
.000	-.3989 -.3990 -.4121
45.000	-.3939 -.4133 -.4312
90.000	-.3939 -.4118 -.4531
135.000	-.4110 -.4197 -.4498
180.000	-.4110 -.4281 -.4190
225.000	-.4135 -.4187 -.4162
270.000	-.3934 -.4213 -.3535
315.000	-.3914 -.4134 -.3965

ALPHA( 4 ) = -4.190 BETA( 4 ) = -3.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	
.000	-.3918 -.4039 -.4014
45.000	-.3903 -.4125 -.4295
90.000	-.3963 -.4161 -.4515
135.000	-.4021 -.4247 -.4368
180.000	-.4211 -.4226 -.4137
225.000	-.4118 -.4181 -.4172
270.000	-.4009 -.4173 -.3421
315.000	-.3569 -.4072 -.3999

ALPHA( 4 ) = -4.180 BETA( 5 ) = -1.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	
.000	-.3918 -.3936 -.4064
45.000	-.3845 -.3991 -.4216
90.000	-.3852 -.4140 -.4454
135.000	-.4002 -.4193 -.4419
180.000	-.4120 -.4160 -.4112
225.000	-.3961 -.4137 -.4117
270.000	-.3926 -.3988 -.3282
315.000	-.3847 -.4033 -.3984



DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1X31)

ARC11-716 IA14 OL+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 4) = -4.180 BETA( 6) = .030

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3471	-.3329	-.3342
45.000	-.3282	-.3372	-.3463
90.000	-.3450	-.3276	-.3591
135.000	-.3319	-.3612	-.3894
180.000	-.3350	-.3935	-.3797
225.000	-.3725	-.3127	-.2558
270.000	-.3481	-.3468	-.2520
315.000	-.3342	-.3594	-.3695

ALPHA( 4) = -4.170 BETA( 7) = 2.020

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3269	-.3362	-.3516
45.000	-.3309	-.3380	-.3594
90.000	-.3357	-.3387	-.3632
135.000	-.3398	-.3468	-.3453
180.000	-.3400	-.4009	-.4066
225.000	-.3428	-.2951	-.1949
270.000	-.3415	-.3683	-.2845
315.000	-.3325	-.3428	-.3455

ALPHA( 4) = -4.240 BETA( 8) = 4.040

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3419	-.3545	-.3649
45.000	-.3306	-.3447	-.3704
90.000	-.3346	-.3508	-.3712
135.000	-.3432	-.3447	-.3697
180.000	-.3412	-.3427	-.3491
225.000	-.3372	-.3442	-.3171
270.000	-.3367	-.3493	-.3128
315.000	-.3465	-.3420	-.3433

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(RB1X31)

ARC11-716 1A14 31+712+512N25-AT10 SRM NOZZLE

ALPHA( 4 ) = -4.230 BETA( 9 ) = 6.050

## SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI

.000 -.3276 -.3424 -.3649  
 45.000 -.3183 -.3371 -.3674  
 90.000 -.3215 -.3314 -.3465  
 135.000 -.3238 -.3231 -.3362  
 180.000 -.3223 -.3198 -.3205  
 225.000 -.3240 -.3233 -.3180  
 270.000 -.3233 -.3362 -.3228  
 315.000 -.3371 -.3359 -.3370

ALPHA( 4 ) = -4.200 BETA( 10 ) = 8.070

## SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI

.000 -.3237 -.3273 -.3583  
 45.000 -.3116 -.3346 -.3623  
 90.000 -.3149 -.3314 -.3480  
 135.000 -.3210 -.3203 -.3231  
 180.000 -.3137 -.3188 -.3180  
 225.000 -.3129 -.3153 -.3035  
 270.000 -.3119 -.3198 -.3192  
 315.000 -.3303 -.3306 -.3312

ALPHA( 4 ) = -4.200 BETA( 11 ) = 10.080

## SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI

.000 -.2976 -.3072 -.3345  
 45.000 -.2841 -.3034 -.3418  
 90.000 -.2959 -.3015 -.3277  
 135.000 -.2959 -.2916 -.3030  
 180.000 -.2933 -.2914 -.2851  
 225.000 -.2856 -.2891 -.2609  
 270.000 -.2915 -.3037 -.3011  
 315.000 -.3059 -.3163 -.2991



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 01-112-S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA( 5 ) = -2.870 BETA( 1 ) = -9.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.4434 -.4436 -.4554  
 45.000 -.4403 -.4406 -.4617  
 90.000 -.4234 -.4454 -.4614  
 135.000 -.4345 -.4590 -.4660  
 180.000 -.4514 -.4544 -.4538  
 225.000 -.4497 -.4552 -.4506  
 270.000 -.4315 -.4567 -.4003  
 315.000 -.4358 -.4519 -.4403

ALPHA( 5 ) = -2.890 BETA( 2 ) = -7.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.4146 -.4280 -.4240  
 45.000 -.4098 -.4202 -.4401  
 90.000 -.3997 -.4260 -.4538  
 135.000 -.4121 -.4384 -.4495  
 180.000 -.4308 -.4348 -.4337  
 225.000 -.4247 -.4316 -.4215  
 270.000 -.4141 -.4295 -.3592  
 315.000 -.4111 -.4325 -.4217

ALPHA( 5 ) = -2.870 BETA( 3 ) = -5.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.4065 -.4047 -.4078  
 45.000 -.4007 -.4055 -.4283  
 90.000 -.3888 -.4143 -.4470  
 135.000 -.4080 -.4240 -.4404  
 180.000 -.4143 -.4237 -.4184  
 225.000 -.4080 -.4217 -.4212  
 270.000 -.3959 -.4191 -.3561  
 315.000 -.4004 -.4164 -.3996

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ASC11-716 1A14 DX+T112+S12N25+AT10 SRM NOZZLE

(RB1A31)

ALPHA( 5 ) = -2.860 BETA( 4 ) = -3.980

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.3899	-.3901	-.4009
45.000	-.3899	-.3999	-.4226
90.000	-.3914	-.4030	-.4389
135.000	-.3989	-.4090	-.4351
180.000	-.4045	-.4125	-.4123
225.000	-.4014	-.4085	-.4110
270.000	-.3896	-.4110	-.3432
315.000	-.3796	-.4085	-.3931

ALPHA( 5 ) = -2.840 BETA( 5 ) = -1.990

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.3861	-.3924	-.3984
45.000	-.3772	-.3936	-.4186
90.000	-.3810	-.4035	-.4352
135.000	-.3949	-.4050	-.4231
180.000	-.3982	-.4093	-.4056
225.000	-.3949	-.3987	-.4028
270.000	-.3800	-.3904	-.3461
315.000	-.3808	-.3974	-.3906

ALPHA( 5 ) = -2.840 BETA( 6 ) = .010

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.3227	-.3423	-.3290
45.000	-.3360	-.3285	-.3741
90.000	-.3312	-.3645	-.3570
135.000	-.3494	-.3305	-.3436
180.000	-.3259	-.3658	-.3832
225.000	-.3431	-.3295	-.2272
270.000	-.3413	-.3373	-.2472
315.000	-.3295	-.3708	-.3698



(RB1 X31)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

$$\text{ALPHA}(5) = -2.645 \quad \text{BETA}(7) = 2.040$$

SECTION : 1)SPM NOZZLE

xx/xx	.9480	.9790	.9930
mm	.0000	-.3400	-.3435
		-.3297	-.3452
45.0000		-.3344	-.3545
90.0000		-.3369	-.3412
135.0000		-.3372	-.3507
180.0000		-.3398	-.3102
225.0000		-.3395	-.3595
270.0000			-.2930
315.0000		-.3362	-.3566
			-.3517

$$\text{ALPHA}(5) = -2.650 \quad \text{BETA}(8) = 4.050$$

SECTION ( 11SRM WZZLE

W/L5	9480	9790	9930
0.000	-3157	-3220	-3376
43.000	-3066	-3177	-3482
90.000	-3064	-3212	-3363
135.000	-3094	-3151	-3318
180.000	-3160	-3124	-3094
225.000	-3102	-3204	-3046
270.000	-3069	-3220	-3041
315.000	-3248	-3237	-3241

[illegible]

SECTION ( 1 ) SR4 W22LE  
DEPENDENT VARIABLE CP

1/LS	.0480	.9750	.9930
PMI			
.0000	-.3113	-.3189	-.3321
42.0000	-.3007	-.3206	-.3468
90.0000	-.2999	-.3122	-.3410
135.0000	-.3042	-.3072	-.3132
160.0000	-.3042	-.3034	-.2995
225.0000	-.3035	-.3006	-.2935
270.0000	-.3075	-.3064	-.3010
315.0000	-.3204	-.3158	-.3075

DATE 09 JAN 75 TABULATED PRESSURE DATA - IAL14A - VOL. 9

(R01X31)

ARC11-716 IAL14 3L+712+312N25+AT110 SRV NOZZLE

ALPHA( 5) = -2.870 BETA( 10) = 8.070

SECTION ( 1) SRV NOZZLE

X/L5 .9480 .9790 .9930

PHI			
.000	-.2961	-.3034	-.3236
45.000	-.2859	-.3021	-.3465
90.000	-.2845	-.3010	-.3304
135.000	-.2893	-.2995	-.3028
180.000	-.2883	-.2980	-.2919
225.000	-.2850	-.2883	-.2866
270.000	-.2853	-.2872	-.2951
315.000	-.2806	-.2805	-.3011

ALPHA( 5) = -2.830 BETA( 11) = 10.090

SECTION ( 1) SRV NOZZLE

X/L5 .9480 .9790 .9930

PHI			
.000	-.3031	-.3228	-.3406
45.000	-.2873	-.3148	-.3567
90.000	-.2915	-.3102	-.3371
135.000	-.3071	-.2973	-.3094
180.000	-.2996	-.2943	-.2933
225.000	-.2971	-.2933	-.2846
270.000	-.3101	-.3006	-.2993
315.000	-.3099	-.3182	-.3133

ALPHA( 6) = -.690 BETA( 1) = -10.000

SECTION ( 1) SRV NOZZLE

X/L5 .9480 .9790 .9930

PHI			
.000	-.4470	-.4508	-.4487
45.000	-.4292	-.4580	-.4663
90.000	-.4287	-.4397	-.4643
135.000	-.4402	-.4472	-.4718
180.000	-.4382	-.4510	-.4622
225.000	-.4350	-.4487	-.4517
270.000	-.4437	-.4437	-.4162
315.000	-.4436	-.4430	-.4627

APC: 1-716 1A14 01-112-S12N25-A110 SRW NZZLE

$$\text{ALPHA}(0) = -.002 \quad \text{BETA}(2) = -.7985$$

DEPENDENT VARIABLE CP

37284 485(1) 4014358

0566' 0646' 0876' 5712

PAI	-0.000	-4212	-4249	-4255
	45.000	-4086	-419	-4456
	90.000	-4053	-4	-4554
	135.000	-4131	-4287	-4456
	180.000	-4207	-4245	-4298
	225.000	-4197	-4227	-4281
	270.000	-4126	-4270	-3827
	315.000	-4109	-4335	-4293

$$\text{ALPHA}(6) = -.670 \quad \text{BETA}(3) = -.5900$$

DEPENDENT VARIABLE CP

SECTION 105 (1) NOTICES

571	.9400	.9790	.9930
-----	-------	-------	-------

PMI	-.000	-.4031	-.4087	-.4119
45,000	-.0001	-.4021	-.4265	
90,000	-.3916	-.4094	-.4426	
135,000	-.4001	-.4177	-.4546	
180,000	-.4127	-.4129	-.4203	
225,000	-.4099	-.4099	-.4135	
270,000	-.3996	-.4132	-.3754	
315,000	-.3921	-.4074	-.4025	

ALPHA ( 1 ) = -.000      BETA ( 4 ) = -.3275

DEPENDENT VARIABLE CP

SECTION 118M NC236

12-3	.9400	.9795	.9930
------	-------	-------	-------

1991	1,000	-3,917	-3,990	-4,000
	45,000	-3,985	-3,993	-4,164
	90,000	-3,920	-4,018	-4,344
	135,000	-3,902	-4,003	-4,289
	180,000	-3,905	-4,003	-4,104
	225,000	-3,917	-4,056	-4,057
	270,000	-3,915	-4,066	-4,009
	315,000	-3,925	-3,993	-4,039

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - 701.9

(981.31)

ARC11-716 1A14 01+112+512N25+AT10 SRM NOZZLE

ALPHA( 6 ) = -.600 BETA( 5 ) = -1.980

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3789	-.3602	-.3990
45.000	-.3759	-.3637	-.4111
90.000	-.3744	-.3912	-.4230
135.000	-.3812	-.3839	-.4207
180.000	-.3781	-.3847	-.3928
225.000	-.3749	-.3922	-.3916
270.000	-.3658	-.3804	-.3244
315.000	-.3741	-.3910	-.3928

ALPHA( 6 ) = -.600 BETA( 6 ) = .010

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3219	-.3520	-.3333
45.000	-.3192	-.3502	-.3491
90.000	-.3209	-.3390	-.3601
135.000	-.3264	-.3263	-.3400
180.000	-.3285	-.3413	-.3711
225.000	-.3277	-.3293	-.2388
270.000	-.3327	-.3248	-.2630
315.000	-.3290	-.3626	-.3617

ALPHA( 6 ) = -.670 BETA( 7 ) = 2.050

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI			
.000	-.3191	-.3344	-.3403
45.000	-.3189	-.3329	-.3576
90.000	-.3261	-.3345	-.3539
135.000	-.3267	-.3353	-.3561
180.000	-.3272	-.3639	-.3630
225.000	-.3307	-.3137	-.2108
270.000	-.3349	-.3471	-.2675
315.000	-.3256	-.3443	-.3520



(R81X31

DATE 06 JAN 75 TABULATED PRESSURE CAT - 1A147 - VOL. 9  
 ARC11-715 1A14 D1+T12-S12K25+T110 SRM NOZZLE

ALPHA( 6 ) = -.690 BETA( 9 ) = 6.080  
 SECTION ( 11SRM NOZZLE )  
 DEPENDENT VARIABLE CP

K/LS	.9480	.9790	.9930
PMI			
.000	-.3158	-.3259	-.3374
45.000	-.3080	-.3203	-.3335
90.000	-.3065	-.3138	-.3245
135.000	-.3123	-.3100	-.3258
180.000	-.3108	-.3125	-.3097
225.000	-.3105	-.3178	-.3072
270.000	-.3067	-.3236	-.2934
315.000	-.3178	-.3223	-.3195

ALPHA( 6 ) = -.690 BETA( 9 ) = 6.080

DEPENDENT VARIABLE CP

K/LS	.9480	.9790	.9930
PMI			
.000	-.3113	-.3171	-.3319
45.000	-.2992	-.3217	-.3490
90.000	-.3032	-.3137	-.3420
135.000	-.3149	-.3107	-.3235
180.000	-.3048	-.3101	-.3046
225.000	-.3912	-.3021	-.2991
270.000	-.3038	-.3074	-.3071
315.000	-.3083	-.3112	-.3104

ALPHA( 6 ) = -.690 BETA( 10 ) = 8.080

DEPENDENT VARIABLE CP

K/LS	.9480	.9790	.9930
PMI			
.000	-.3047	-.3207	-.3398
45.000	-.2924	-.3165	-.3523
90.000	-.2964	-.3072	-.3345
135.000	-.3072	-.3062	-.3180
180.000	-.3074	-.3022	-.2948
225.000	-.3009	-.2922	-.2955
270.000	-.3004	-.3037	-.3062
315.000	-.3165	-.3213	-.3085

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X31)

ARC11-716 1A14 01+112+512/25+AT10 SRM NOZZLE

ALPHA( 6 ) = -.680 BETA( 11 ) = 10.120

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.480 9.790 9.930

PMI  
.000 -.3127 -.3278 -.3443  
45.000 -.2908 -.3268 -.3619  
90.000 -.2971 -.3154 -.3436  
135.000 -.3074 -.3102 -.3210  
180.000 -.3006 -.3099 -.3026  
225.000 -.2991 -.2968 -.2918  
270.000 -.3029 -.3094 -.2998  
315.000 -.3240 -.3265 -.3106

ALPHA( 7 ) = 2.080 BETA( 1 ) = -10.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.480 9.790 9.930

PMI  
.000 -.4434 -.4408 -.4477  
45.000 -.4346 -.4484 -.4610  
90.000 -.4216 -.4459 -.4631  
135.000 -.4299 -.4477 -.4683  
180.000 -.4432 -.4434 -.4314  
225.000 -.4381 -.4399 -.4434  
270.000 -.4276 -.4364 -.4181  
315.000 -.4311 -.4371 -.4378

ALPHA( 7 ) = 1.860 BETA( 2 ) = -5.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.480 9.790 9.930

PMI  
.000 -.3809 -.4063 -.4055  
45.000 -.3832 -.4028 -.4125  
90.000 -.3794 -.4022 -.4298  
135.000 -.3882 -.4002 -.4238  
180.000 -.3907 -.3924 -.3953  
225.000 -.3894 -.3932 -.3968  
270.000 -.3842 -.3874 -.3625  
315.000 -.3932 -.4022 -.4025



\*ABUJAH: MESSAGE DATA - 1A:4 - 40-10

(RB1X21)

3-11-76 1:14 21+12+S12N25+AT12 54 WZ213

[illegible]

DEPENDENT VARIABLE CP

3722A W-22LE

1993 1993 1993 1993

[illegible]
$$BEYAC(4) = -1.990$$
DEPENDENT VARIABLE C<sub>0</sub>

SECTION 11522.5

CS666 CS667 CS668

1981		-3736	-3714	-3089
1980		-3618	-3726	-4017
1979		-3613	-3799	-4393
1978		-3681	-3751	-3929
1977		-3621	-3746	-3701
1976		-3561	-3791	-3751
1975		-3566	-3741	-3147
1974		-3566	-3739	-3726

08C  
=

DEPENDENT VARIABLE C6

37ZTC, nbs(1) NC115 5

5000 9935 9935

1961	0.000	- 3118	- 3211	- 3287
	45.000	- 3111	- 3229	- 3621
	90.000	- 3114	- 3312	- 3611
	135.000	- 3214	- 3322	- 3367
	180.000	- 3221	- 3443	- 3444
	225.000	- 3287	- 3247	- 2323
	270.000	- 3241	- 3176	- 2445
	315.000	- 3133	- 2546	- 3624



DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 5064

ARC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE

(R81X31)

ALPHA( 7) = 1.970 BETA( 6) = 2.040

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 9790 .9930

PHI			
.000	-.3122	-.3242	-.3287
45.000	-.3115	-.3297	-.3485
90.000	-.3127	-.3255	-.3480
135.000	-.3182	-.3202	-.3262
180.000	-.3157	-.3445	-.3501
225.000	-.3192	-.3157	-.2243
270.000	-.3272	-.3272	-.2427
315.000	-.3217	-.3367	-.3519

ALPHA( 7) = 2.050 BETA( 7) = 4.050

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 9790 .9930

PHI			
.000	-.3266	-.3313	-.3484
45.000	-.3246	-.3296	-.3597
90.000	-.3183	-.3358	-.3612
135.000	-.3200	-.3278	-.3461
180.000	-.3291	-.3248	-.3234
225.000	-.3163	-.3265	-.3229
270.000	-.3150	-.3328	-.3026
315.000	-.3283	-.3361	-.3352

ALPHA( 7) = 2.050 BETA( 8) = 6.070

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 9790 .9930

PHI			
.000	-.3298	-.3278	-.3621
45.000	-.3128	-.3376	-.3699
90.000	-.3128	-.3279	-.3539
135.000	-.3276	-.3311	-.3421
180.000	-.3243	-.3264	-.3262
225.000	-.3153	-.3214	-.3145
270.000	-.3228	-.3319	-.3270
315.000	-.3271	-.3356	-.3410



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-715 1A14 01+112+S12N25+AT10 SRM NOZZLE (R81X31)

ALPHA( 7 ) = 2.040 BETA( 9 ) = 5.020

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3368	-.3406	-.3677
45.000	-.3172	-.3350	-.3808
90.000	-.3222	-.3390	-.3562
135.000	-.3245	-.3317	-.3380
180.000	-.3192	-.3312	-.3262
225.000	-.3197	-.3292	-.3226
270.000	-.3260	-.3292	-.3389
315.000	-.3395	-.3398	-.3437

ALPHA( 7 ) = 2.020 BETA( 10 ) = 10.110

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3319	-.3439	-.3654
45.000	-.3212	-.3374	-.3842
90.000	-.3145	-.3324	-.3559
135.000	-.3185	-.3271	-.3389
180.000	-.3237	-.3256	-.3167
225.000	-.3207	-.3254	-.3192
270.000	-.3227	-.3369	-.3319
315.000	-.3434	-.3404	-.3379

ALPHA( 8 ) = 4.110 BETA( 1 ) = -10.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4243	-.4366	-.4469
45.000	-.4303	-.4351	-.4579
90.000	-.4223	-.4401	-.4627
135.000	-.4298	-.4409	-.4512
180.000	-.4283	-.4394	-.4305
225.000	-.4236	-.4286	-.4337
270.000	-.4283	-.4316	-.4991
315.000	-.4346	-.4389	-.4372

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
ARC11-716 1A14 01+Y12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA0 ( 0 ) = 4.170 BETA0 ( 2 ) = -7.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.4075 -.4195 -.4193  
45.000 -.3970 -.4222 -.4375  
90.000 -.3995 -.4213 -.4440  
135.000 -.4055 -.4178 -.4375  
180.000 -.4122 -.4118 -.4138  
225.000 -.4130 -.4091 -.4088  
270.000 -.4035 -.4091 -.3742  
315.000 -.4065 -.4148 -.4237

ALPHA0 ( 0 ) = 4.150 BETA0 ( 3 ) = -5.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.3940 -.3965 -.4097  
45.000 -.3856 -.4010 -.4277  
90.000 -.3818 -.4010 -.4322  
135.000 -.3798 -.4028 -.4207  
180.000 -.3898 -.3978 -.4011  
225.000 -.3930 -.3920 -.3949  
270.000 -.3878 -.3923 -.3487  
315.000 -.3873 -.4072 -.4043

ALPHA0 ( 0 ) = 4.160 BETA0 ( 4 ) = -3.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.3790 -.3940 -.3989  
45.000 -.3780 -.3878 -.4159  
90.000 -.3803 -.3932 -.4151  
135.000 -.3818 -.3857 -.4034  
180.000 -.3793 -.3852 -.3879  
225.000 -.3763 -.3897 -.3797  
270.000 -.3763 -.3870 -.3410  
315.000 -.3790 -.3915 -.4038



DATE 05 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81X31)

ARC11-716 IA14 01+T12-S12N23+AT10 SRM NOZZLE

ALPHA( 0 ) = 4.040 BETA( 5 ) = -1.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/LS .9480 .9790 .9930

PMI  
.000 -.3828 -.3801 -.3956  
45.000 -.3687 -.3604 -.4100  
90.000 -.3644 -.3764 -.4125  
135.000 -.3590 -.3794 -.3956  
180.000 -.3654 -.3749 -.3817  
225.000 -.3679 -.3689 -.3767  
270.000 -.3711 -.3791 -.3229  
315.000 -.3794 -.3853 -.3859

ALPHA( 0 ) = 4.050 BETA( 6 ) = .030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/LS .9480 .9790 .9930

PMI  
.000 -.3319 -.3346 -.3448  
45.000 -.3194 -.3329 -.3668  
90.000 -.3229 -.3364 -.3658  
135.000 -.3291 -.3271 -.3556  
180.000 -.3279 -.3418 -.3544  
225.000 -.3344 -.3453 -.2694  
270.000 -.3279 -.3241 -.2359  
315.000 -.3334 -.3782 -.3770

ALPHA( 0 ) = 4.050 BETA( 7 ) = 2.090

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/LS .9480 .9790 .9930

PMI  
.000 -.3294 -.3523 -.3438  
45.000 -.3229 -.3374 -.3675  
90.000 -.3214 -.3224 -.3556  
135.000 -.3304 -.3321 -.3376  
180.000 -.3324 -.3333 -.3569  
225.000 -.3282 -.3473 -.2483  
270.000 -.3351 -.3453 -.2250  
315.000 -.3336 -.3623 -.3683

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(RB1X31)

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(8) = 4.030 BETA(8) = 4.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9480	.9790	.9930
PMI			
.000	-.3420	-.3550	-.3740
45.000	-.3435	-.3560	-.3855
90.000	-.3360	-.3525	-.3737
135.000	-.3358	-.3475	-.3620
180.000	-.3390	-.3418	-.3425
225.000	-.3348	-.3515	-.3440
270.000	-.3348	-.3617	-.3037
315.000	-.3520	-.3542	-.3547

ALPHA(9) = 4.020 BETA(9) = 6.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9480	.9790	.9930
PMI			
.000	-.3454	-.3578	-.3780
45.000	-.3311	-.3529	-.3855
90.000	-.3309	-.3455	-.3656
135.000	-.3399	-.3464	-.3551
180.000	-.3346	-.3391	-.3373
225.000	-.3354	-.3464	-.3368
270.000	-.3401	-.3511	-.3305
315.000	-.3499	-.3526	-.3589

ALPHA(10) = 4.010 BETA(10) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9480	.9790	.9930
PMI			
.000	-.3484	-.3582	-.3851
45.000	-.3292	-.3559	-.3953
90.000	-.3307	-.3445	-.3686
135.000	-.3350	-.3437	-.3532
180.000	-.3322	-.3292	-.3317
225.000	-.3422	-.3352	-.3325
270.000	-.3474	-.3474	-.3484
315.000	-.3547	-.3509	-.3561



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X31)

ARC11-716 1A14 01+112+S12N25+AT10 SRM NOZZLE

ALPHA( 8 ) = 4.000 BETA( 11 ) = 10.130

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.3356
.000	-.3368
.000	-.3350
.000	-.3341
.000	-.3404
.000	-.3642
.000	-.3354
.000	-.3386
.000	-.3333
.000	-.3309
.000	-.3339
.000	-.3222
.000	-.3381
.000	-.3401
.000	-.3371
.000	-.3475
.000	-.3478
.000	-.3487
.000	-.3580
.000	-.3550
.000	-.3564

ALPHA( 9 ) = 6.000 BETA( 1 ) = -9.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.4309
.000	-.4464
.000	-.4413
.000	-.4212
.000	-.4419
.000	-.4573
.000	-.4154
.000	-.4441
.000	-.4663
.000	-.4237
.000	-.4428
.000	-.4616
.000	-.4362
.000	-.4356
.000	-.4346
.000	-.4237
.000	-.4346
.000	-.4311
.000	-.4194
.000	-.4214
.000	-.4156
.000	-.4294
.000	-.4344
.000	-.4326

ALPHA( 9 ) = 5.930 BETA( 2 ) = -7.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.4290
.000	-.4280
.000	-.4393
.000	-.4112
.000	-.4211
.000	-.4410
.000	-.4072
.000	-.4288
.000	-.4604
.000	-.4159
.000	-.4224
.000	-.4405
.000	-.4196
.000	-.4236
.000	-.4340
.000	-.4186
.000	-.4201
.000	-.4229
.000	-.4137
.000	-.4169
.000	-.3998
.000	-.4119
.000	-.4241
.000	-.4290

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01X31)

ARC11-716 1A14 01+112+512N25+AT10 SRM NOZZLE

ALPHA( 9 ) = 5.960 BETA( 3 ) = -5.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4116	-.4178	-.4240
45.000	-.3994	-.4156	-.4362
90.000	-.4012	-.4203	-.4479
135.000	-.4037	-.4196	-.4313
180.000	-.4064	-.4094	-.4121
225.000	-.4064	-.4084	-.4054
270.000	-.4004	-.4074	-.3732
315.000	-.4054	-.4145	-.4129

ALPHA( 9 ) = 5.950 BETA( 4 ) = -3.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4071	-.4064	-.4156
45.000	-.3950	-.4079	-.4299
90.000	-.3841	-.4027	-.4365
135.000	-.3861	-.4044	-.4138
180.000	-.3898	-.3935	-.4082
225.000	-.3903	-.3950	-.4006
270.000	-.3868	-.3975	-.3640
315.000	-.3935	-.3950	-.4080

ALPHA( 9 ) = 5.940 BETA( 5 ) = -1.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3942	-.3932	-.4154
45.000	-.3819	-.3996	-.4284
90.000	-.3787	-.4024	-.4242
135.000	-.3721	-.3912	-.4064
180.000	-.3627	-.3849	-.3968
225.000	-.3772	-.3872	-.3853
270.000	-.3684	-.3979	-.3391
315.000	-.3939	-.3999	-.4052



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X31)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 9 ) = 5.940 BETA( 6 ) = .040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PHI  
.000 -.3555 -.3610 -.3607  
45.000 -.3497 -.3607 -.3972  
90.000 -.3562 -.3547 -.3937  
135.000 -.3530 -.3592 -.3722  
180.000 -.3425 -.3650 -.3749  
225.000 -.3662 -.3777 -.2984  
270.000 -.3577 -.3512 -.2390  
315.000 -.3570 -.4034 -.4018

ALPHA( 9 ) = 5.880 BETA( 7 ) = 2.060

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PHI  
.000 -.3656 -.3614 -.3629  
45.000 -.3374 -.3547 -.3929  
90.000 -.3374 -.3485 -.3795  
135.000 -.3518 -.3478 -.3641  
180.000 -.3485 -.3584 -.3720  
225.000 -.3463 -.3679 -.2746  
270.000 -.3505 -.3421 -.2152  
315.000 -.3498 -.3894 -.3923

ALPHA( 9 ) = 5.990 BETA( 8 ) = 4.070

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PHI  
.000 -.3657 -.3681 -.3806  
45.000 -.3532 -.3721 -.3955  
90.000 -.3510 -.3584 -.3764  
135.000 -.3500 -.3569 -.3724  
180.000 -.3500 -.3520 -.3613  
225.000 -.3504 -.3724 -.3632  
270.000 -.3622 -.3668 -.3034  
315.000 -.3677 -.3811 -.3796



DATE 08 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1X31)

ARC11-716 IA14 OA-T12+S12N25+AT10 SRM NOZZLE

ALPHA( 9) = 5.990 BETA( 9) = 6.130

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L 0.9400 0.9790 0.9930

PHI  
.0000 -.3328 -.3711 -.3875  
45.0000 -.3540 -.3761 -.3952  
90.0000 -.3433 -.3597 -.3759  
135.0000 -.3391 -.3473 -.3657  
180.0000 -.3540 -.3466 -.3462  
225.0000 -.3475 -.3553 -.3549  
270.0000 -.3545 -.3746 -.3551  
315.0000 -.3642 -.3726 -.3663

ALPHA( 9) = 6.020 BETA( 10) = 8.130

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L 0.9400 0.9790 0.9930

PHI  
.0000 -.3552 -.3664 -.3681  
45.0000 -.3903 -.3659 -.4032  
90.0000 -.3470 -.3582 -.3717  
135.0000 -.3386 -.3515 -.3632  
180.0000 -.3463 -.3441 -.3487  
225.0000 -.3451 -.3451 -.3554  
270.0000 -.3540 -.3610 -.3686  
315.0000 -.3647 -.3627 -.3629

ALPHA( 9) = 5.990 BETA( 11) = 10.150

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L 0.9400 0.9790 0.9930

PHI  
.0000 -.3433 -.3711 -.3919  
45.0000 -.3540 -.3572 -.4051  
90.0000 -.3381 -.3483 -.3646  
135.0000 -.3328 -.3433 -.3524  
180.0000 -.3301 -.3326 -.3322  
225.0000 -.3413 -.3450 -.3436  
270.0000 -.3457 -.3554 -.3603  
315.0000 -.3621 -.3644 -.3632



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(88:331)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(10) = 0.090 BETA( 1 ) = -9.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.4314
.000	-.4403
.000	-.4369
45.000	-.4187
45.000	-.4284
45.000	-.4633
90.000	-.4249
90.000	-.4394
90.000	-.4668
135.000	-.4284
135.000	-.4374
135.000	-.4521
180.000	-.4363
180.000	-.4319
180.000	-.4343
225.000	-.4356
225.000	-.4317
225.000	-.4286
270.000	-.4214
270.000	-.4309
270.000	-.4190
315.000	-.4256
315.000	-.4292
315.000	-.4289

ALPHA(10) = 0.000 BETA( 2 ) = -7.950

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.4270
.000	-.4300
.000	-.4385
45.000	-.4161
45.000	-.4337
45.000	-.4447
90.000	-.4081
90.000	-.4270
90.000	-.4566
135.000	-.4313
135.000	-.4295
135.000	-.4422
180.000	-.4275
180.000	-.4315
180.000	-.4317
225.000	-.4173
225.000	-.4290
225.000	-.4220
270.000	-.4111
270.000	-.4156
270.000	-.4099
315.000	-.4231
315.000	-.4315
315.000	-.4309

ALPHA(10) = 7.980 BETA( 3 ) = -5.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI	CP
.000	-.4162
.000	-.4209
.000	-.4276
45.000	-.4043
45.000	-.4234
45.000	-.4416
90.000	-.3978
90.000	-.4252
90.000	-.4408
135.000	-.4140
135.000	-.4237
135.000	-.4421
180.000	-.4229
180.000	-.4140
180.000	-.4119
225.000	-.4165
225.000	-.4140
225.000	-.4109
270.000	-.4043
270.000	-.4127
270.000	-.3864
315.000	-.4090
315.000	-.4147
315.000	-.4185

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DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VZL 9

(R81X31)

ARC11-716 1A14 01+T12+S12N25+AT1D SRM NOZZLE

ALPHA(10) = 7.940 BETA( 4) = -3.970

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/ZS .9400 .9790 .9930

CHI	.000	-.3989	-.4028	-.4133
45.000	-.3887	-.4088	-.4232	
90.000	-.3894	-.4076	-.4374	
135.000	-.3964	-.4013	-.4198	
180.000	-.3936	-.3934	-.3936	
225.000	-.3867	-.3979	-.3983	
270.000	-.3904	-.3934	-.3997	
315.000	-.3944	-.4061	-.4045	

ALPHA(10) = 7.940 BETA( 5) = -1.980

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/ZS .9400 .9790 .9930

CHI	.000	-.3996	-.3991	-.4181
45.000	-.4084	-.3969	-.4356	
90.000	-.4045	-.4044	-.4281	
135.000	-.3899	-.4091	-.4054	
180.000	-.3904	-.4146	-.3932	
225.000	-.3864	-.4041	-.4105	
270.000	-.4191	-.4099	-.3792	
315.000	-.3954	-.4041	-.4034	

ALPHA(10) = 7.890 BETA( 6) = .030

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/ZS .9400 .9790 .9930

CHI	.000	-.3962	-.3840	-.4320
45.000	-.3703	-.4172	-.4594	
90.000	-.3902	-.4090	-.4462	
135.000	-.3940	-.3765	-.4103	
180.000	-.3905	-.4036	-.4083	
225.000	-.3915	-.4070	-.3929	
270.000	-.4100	-.4247	-.2755	
315.000	-.4090	-.4181	-.4342	



DATE 06 JAN 71 TABULATED PRESSURE DATA - 1A14 - VOL. 9

(881X31)

ARC11-716 1A14 DI+712+S12N25+AT10 SRM NOZZLE

ALPHAD(10) = 7.940 BETAD ( 7) = 2.060

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9400	.9790	.9930
PMI			
.000	-.3766	-.3870	-.3821
45.000	-.3674	-.3848	-.4169
90.000	-.3679	-.3870	-.4182
135.000	-.3666	-.3631	-.3808
180.000	-.3557	-.3801	-.3836
225.000	-.3693	-.4077	-.3372
270.000	-.3621	-.3641	-.2281
315.000	-.3691	-.4125	-.4228

ALPHAD(10) = 9.010 BETAD ( 8) = 4.090

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9400	.9790	.9930
PMI			
.000	-.3648	-.4013	-.4204
45.000	-.3793	-.3991	-.4226
90.000	-.3711	-.3841	-.4129
135.000	-.3686	-.3778	-.3691
180.000	-.3691	-.3713	-.3722
225.000	-.3726	-.3891	-.3759
270.000	-.3736	-.3966	-.3266
315.000	-.3931	-.3886	-.3916

ALPHAD(10) = 8.000 BETAD ( 9) = 6.120

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9400	.9790	.9930
PMI			
.000	-.3785	-.3964	-.4080
45.000	-.3777	-.3859	-.4210
90.000	-.3790	-.3787	-.4083
135.000	-.3732	-.3737	-.3837
180.000	-.3638	-.3567	-.3666
225.000	-.3695	-.3727	-.3779
270.000	-.3782	-.3914	-.3598
315.000	-.3911	-.3961	-.3925

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TABULATED PRESSURE DATA - IAI144 - VOL. 9

DATE 06 JAN 75

(81X31)

ARC11-716 IAI4 ON-Y12+312425+ATIO SEM NOZZLE

ALPHA(10) = 7.000 BETAD (10) = 8.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PMI			
.000	-.3792	-.3669	-.4130
45.000	-.3667	-.3779	-.4150
90.000	-.3654	-.3709	-.3666
135.000	-.3684	-.3809	-.3779
180.000	-.3659	-.3642	-.3663
225.000	-.3644	-.3564	-.3659
270.000	-.3752	-.3769	-.3762
315.000	-.3916	-.3931	-.3882

ALPHA(10) = 7.950 BETAD (11) = 10.200

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PMI			
.000	-.3756	-.4022	-.4108
45.000	-.3649	-.3917	-.4329
90.000	-.3711	-.3811	-.4018
135.000	-.3784	-.3678	-.3771
180.000	-.3679	-.3598	-.3673
225.000	-.3714	-.3631	-.3628
270.000	-.3789	-.3883	-.3808
315.000	-.4002	-.3966	-.3922

ALPHA(11) = 9.990 BETAD (1) = -9.930

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PMI			
.000	-.4312	-.4451	-.4449
45.000	-.4245	-.4354	-.4591
90.000	-.4183	-.4459	-.4650
135.000	-.4282	-.4464	-.4643
180.000	-.4424	-.4484	-.4480
225.000	-.4272	-.4459	-.4376
270.000	-.4287	-.4472	-.4253
315.000	-.4262	-.4332	-.4302



DATE 06 JAN 75 TABULATED PRESSURE DATA - IATA4 - VOL. 5

(R01X31)

ARC11-716 IATA OR-T12-S12M25-AT10 SRM NOZZLE

ALPHA3(11) = 10.010 BETAS ( 2 ) = -7.910

SECTION ( 11SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI  
.000 -.4375 -.4537 -.4567  
45.000 -.4300 -.4502 -.4679  
90.000 -.4342 -.4530 -.4821  
135.000 -.4429 -.4590 -.4734  
180.000 -.4532 -.4594 -.4531  
225.000 -.4432 -.4487 -.4456  
270.000 -.4315 -.4380 -.4268  
315.000 -.4459 -.4457 -.4345

ALPHA3(11) = 9.920 BETAS ( 3 ) = -5.920

SECTION ( 11SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI  
.000 -.4423 -.4530 -.4539  
45.000 -.4321 -.4555 -.4724  
90.000 -.4296 -.4537 -.4938  
135.000 -.4393 -.4619 -.4796  
180.000 -.4446 -.4499 -.4534  
225.000 -.4363 -.4440 -.4447  
270.000 -.4378 -.4430 -.4184  
315.000 -.4398 -.4459 -.4368

ALPHA3(11) = 9.940 BETAS ( 4 ) = -3.950

SECTION ( 11SRM NOZZLE

X/L5 .9480 .9790 .9930

PMI  
.000 -.4389 -.4546 -.4539  
45.000 -.4421 -.4571 -.4922  
90.000 -.4321 -.4492 -.4889  
135.000 -.4356 -.4474 -.4682  
180.000 -.4396 -.4464 -.4486  
225.000 -.4344 -.4417 -.4439  
270.000 -.4311 -.4344 -.4174  
315.000 -.4431 -.4459 -.4406

(RB1X31)

ARC11-716 1A14 01\*712\*912N25\*AT10 SRM NOZZLE

ALPHA(11) = 9.940 BETAD ( 5) = -.960

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4243	-.4458	-.4540
45.000	-.4263	-.4403	-.4772
90.000	-.4219	-.4418	-.4862
135.000	-.4273	-.4331	-.4450
180.000	-.4296	-.4383	-.4268
225.000	-.4199	-.4306	-.4283
270.000	-.4303	-.4371	-.4047
315.000	-.4343	-.4363	-.4350

ALPHA(11) = 9.880 BETAD ( 6) = .040

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4279	-.4366	-.4463
45.000	-.4222	-.4321	-.4601
90.000	-.4222	-.4299	-.4665
135.000	-.4172	-.4311	-.4257
180.000	-.4259	-.4247	-.4162
225.000	-.4110	-.4257	-.4266
270.000	-.4127	-.4302	-.3787
315.000	-.4187	-.4232	-.4403

ALPHA(11) = 9.960 BETAD ( 7) = 2.070

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4035	-.4236	-.4302
45.000	-.3952	-.4092	-.4501
90.000	-.3897	-.4060	-.4464
135.000	-.4025	-.3980	-.4112
180.000	-.4017	-.3977	-.4016
225.000	-.3987	-.4072	-.3914
270.000	-.3990	-.4175	-.3962
315.000	-.4072	-.3962	-.4155



TABULATED PRESSURE DATA - 1A14A - VOL. 9

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

(R1X31)

DATE 06 JAN 75

ALPHA(11) = 9.990 BETA( 8) = 4.110

SECTION ( 1)SRM NOZZLE

X/L 9.480 .9790 .9930

PHI  
.000 -.3764 -.3833 -.4076  
45.000 -.3661 -.3806 -.4181  
90.000 -.3779 -.3854 -.3994  
135.000 -.3739 -.3797 -.3752  
180.000 -.3684 -.3812 -.3762  
225.000 -.3642 -.3702 -.3401  
270.000 -.3741 -.3799 -.3930  
315.000 -.3784 -.3899 -.3856

ALPHA(11) = 9.980 BETA( 9) = 6.130

SECTION ( 1)SRM NOZZLE

X/L 9.480 .9790 .9930

PHI  
.000 -.3636 -.3875 -.4064  
45.000 -.3454 -.3858 -.4127  
90.000 -.3543 -.3743 -.3992  
135.000 -.3748 -.3770 -.3773  
180.000 -.3641 -.3690 -.3583  
225.000 -.3511 -.3663 -.3486  
270.000 -.3603 -.3616 -.3551  
315.000 -.3796 -.3933 -.3777

ALPHA(11) = 10.030 BETA(10) = 6.170

SECTION ( 1)SRM NOZZLE

X/L 9.480 .9790 .9930

PHI  
.000 -.3654 -.3928 -.4115  
45.000 -.3604 -.3873 -.4137  
90.000 -.3711 -.3866 -.3973  
135.000 -.3823 -.3858 -.3729  
180.000 -.3731 -.3739 -.3723  
225.000 -.3728 -.3724 -.3636  
270.000 -.3728 -.3811 -.3661  
315.000 -.3893 -.3873 -.3879



(RB1X31)

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(11) = 10.050 BETA(11) = 10.230

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.5480	.9790	.9930
PHI			
.000	-.3698	-.3862	-.4046
45.000	-.3565	-.3927	-.4078
90.000	-.3660	-.3733	-.3983
135.000	-.3777	-.3693	-.3638
180.000	-.3708	-.3593	-.3731
225.000	-.3680	-.3658	-.3654
270.000	-.3747	-.3826	-.3701
315.000	-.3857	-.3791	-.3825



TABULATED PRESSURE DATA - 1A14A - VOL. 9

DATE 08 JAN 75

(R81X32) ( 17 APR 74 )

ARC11-716 1A14 OI+T12+S12N25+AT10 SRM NOZZLE

PARAMETRIC DATA

MACH = 1.100 ELEVON = .000  
RUDDER = .000 SPDRK = .000

REFERENCE DATA

SRF = 2.4210 SQ. FT. XMRP = 29.5800 INCHES  
LREF = 38.7390 INCHES YMRP = .0000 INCHES  
BRF = 38.7390 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

ALPHA( 1 ) = -10.240 BETA( 1 ) = -9.900

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
.000 -.5599 -.5722 -.5724  
45.000 -.5569 -.5630 -.5706  
90.000 -.5570 -.5641 -.5711  
135.000 -.5521 -.5630 -.5704  
180.000 -.5531 -.5631 -.5575  
225.000 -.5521 -.5623 -.5544  
270.000 -.5560 -.5620 -.5518  
315.000 -.5544 -.5756 -.5406

ALPHA( 1 ) = -10.220 BETA( 2 ) = -7.890

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
.000 -.5529 -.5644 -.5628  
45.000 -.5471 -.5531 -.5697  
90.000 -.5463 -.5558 -.5657  
135.000 -.5453 -.5558 -.5639  
180.000 -.5479 -.5547 -.5525  
225.000 -.5521 -.5521 -.5504  
270.000 -.5437 -.5544 -.5496  
315.000 -.5502 -.5644 -.5394

ALPHA( 1 ) = -10.220 BETA( 3 ) = -5.900

DEPENDENT VARIABLE CP

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
.000 -.5471 -.5503 -.5579  
45.000 -.5489 -.5476 -.5626  
90.000 -.5395 -.5516 -.5621  
135.000 -.5405 -.5513 -.5595  
180.000 -.5400 -.5497 -.5480  
225.000 -.5395 -.5484 -.5368

(RB1X32)

ARC11-716 1A14 0A+T12+S12N25+AT10 SRM NOZZLE

ALPHA(1) = -10.220 BETA(3) = -5.900

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

270.000 -.5403 -.5487 -.5323  
315.000 -.5471 -.5576 -.5441

ALPHA(1) = -10.230 BETA(4) = -3.930

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.5485 -.5613 -.5637  
45.000 -.5519 -.5653 -.5714  
90.000 -.5487 -.5630 -.5756  
135.000 -.5532 -.5627 -.5698  
180.000 -.5540 -.5585 -.5491  
225.000 -.5509 -.5543 -.5530  
270.000 -.5511 -.5714 -.4755  
315.000 -.5587 -.5727 -.5783

ALPHA(1) = -10.230 BETA(5) = -1.940

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.5465 -.5580 -.5591  
45.000 -.5439 -.5591 -.5728  
90.000 -.5444 -.5573 -.5670  
135.000 -.5460 -.5492 -.5591  
180.000 -.5492 -.5447 -.5401  
225.000 -.5476 -.5466 -.5500  
270.000 -.5486 -.5610 -.4159  
315.000 -.5518 -.5623 -.5636

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(RB1X32)

ARC11-715 IA14 01+T112+912425+AT10 SRM NOZZLE

ALPHA( 1 ) = -10.240 BETA( 6 ) = .030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5329	-.5344	-.5412
45.000	-.5329	-.5407	-.5583
90.000	-.5258	-.5378	-.5530
135.000	-.5263	-.5368	-.5410
180.000	-.5297	-.5274	-.5162
225.000	-.5245	-.5350	-.5336
270.000	-.5261	-.5428	-.4012
315.000	-.5292	-.5373	-.5378

ALPHA( 1 ) = -10.250 BETA( 7 ) = 2.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE C

X/LS	.9480	.9790	.9930
PHI			
.000	-.4879	-.4931	-.4991
45.000	-.4873	-.4931	-.5140
90.000	-.4871	-.4970	-.5289
135.000	-.4876	-.5009	-.5070
180.000	-.5012	-.5033	-.4971
225.000	-.4871	-.5171	-.4562
270.000	-.4881	-.4991	-.3950
315.000	-.4944	-.4934	-.4991

ALPHA( 1 ) = -10.260 BETA( 8 ) = 4.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4389	-.4475	-.4660
45.000	-.4236	-.4389	-.4584
90.000	-.4259	-.4402	-.4522
135.000	-.4358	-.4290	-.4449
180.000	-.4251	-.4345	-.4403
225.000	-.4343	-.4452	-.3864
270.000	-.4337	-.4644	-.4187
315.000	-.4483	-.4555	-.4543

ARC11-716 IA14 01+112+S12N25+AT10 SRM NOZZLE

(R81X32)

ALPHA(1) = -10.250 BETA(9) = 6.090

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.3948	-.4164	-.4320
45.000	-.3948	-.4068	-.4370
90.000	-.4005	-.4312	-.4122
135.000	-.4080	-.3932	-.4075
180.000	-.4016	-.4010	-.3980
225.000	-.3919	-.3921	-.3920
270.000	-.4050	-.4172	-.4131
315.000	-.4191	-.4229	-.4237

ALPHA(1) = -10.240 BETA(10) = 8.120

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.3814	-.3916	-.4123
45.000	-.3699	-.3945	-.4159
90.000	-.3927	-.3992	-.4094
135.000	-.3994	-.3919	-.3962
180.000	-.3843	-.3848	-.3856
225.000	-.3831	-.3801	-.3695
270.000	-.3783	-.3819	-.3807
315.000	-.3679	-.3927	-.3845

ALPHA(1) = -10.250 BETA(11) = 10.110

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.3899	-.3957	-.4123
45.000	-.3790	-.3959	-.4186
90.000	-.3928	-.4011	-.4199
135.000	-.4097	-.4032	-.4059
180.000	-.4053	-.4014	-.4095
225.000	-.3959	-.3907	-.3804
270.000	-.3855	-.3860	-.3830
315.000	-.3865	-.3844	-.3822



DATE 05 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 02+T12+S12N25+AT10 SRM NOZZLE

ALPHA(2) = -8.190 BETAD (1) = -9.970

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .3790 .9930

PHI  
.000 -.5397 -.5564 -.5587  
45.000 -.5412 -.5544 -.5623  
90.000 -.5436 -.5515 -.5541  
135.000 -.5423 -.5494 -.5580  
180.000 -.5420 -.5505 -.5456  
225.000 -.5461 -.5494 -.5436  
270.000 -.5467 -.5497 -.5464  
315.000 -.5500 -.5556 -.5469

ALPHA(2) = -8.200 BETAD (2) = -7.980

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PHI  
.000 -.5412 -.5469 -.5463  
45.000 -.5392 -.5425 -.5509  
90.000 -.5324 -.5411 -.5514  
135.000 -.5324 -.5372 -.5509  
180.000 -.5311 -.5434 -.5402  
225.000 -.5374 -.5375 -.5377  
270.000 -.5348 -.5416 -.5374  
315.000 -.5397 -.5507 -.5382

ALPHA(2) = -8.210 BETAD (3) = -5.960

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PHI  
.000 -.5273 -.5346 -.5415  
45.000 -.5304 -.5346 -.5495  
90.000 -.5270 -.5374 -.5493  
135.000 -.5302 -.5381 -.5457  
180.000 -.5302 -.5354 -.5370  
225.000 -.5304 -.5348 -.5349  
270.000 -.5276 -.5348 -.5321  
315.000 -.5314 -.5428 -.5429

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 Q1+T12+S12+Q3+AT10 SRM NOZZLE

ALPHA( 2 ) = -0.220 BETA( 4 ) = -1.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.5340 -.5395 -.5493  
45.000 -.5333 -.5400 -.5565  
90.000 -.5307 -.5425 -.5588  
135.000 -.5322 -.5379 -.5495  
180.000 -.5320 -.5340 -.5326  
225.000 -.5327 -.5327 -.5337  
270.000 -.5397 -.5505 -.4257  
315.000 -.5402 -.5436 -.5448

ALPHA( 2 ) = -0.190 BETA( 5 ) = .010

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.5103 -.5158 -.5220  
45.000 -.5116 -.5186 -.5370  
90.000 -.5162 -.5228 -.5396  
135.000 -.5093 -.5194 -.5251  
180.000 -.5129 -.5176 -.5146  
225.000 -.5080 -.5145 -.5144  
270.000 -.5075 -.5259 -.4083  
315.000 -.5168 -.5145 -.5190

ALPHA( 2 ) = -0.190 BETA( 6 ) = 2.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.4823 -.4927 -.4902  
45.000 -.4821 -.4914 -.5093  
90.000 -.4803 -.4977 -.5176  
135.000 -.4888 -.4899 -.5059  
180.000 -.4922 -.4868 -.4937  
225.000 -.4865 -.5015 -.4844  
270.000 -.4813 -.4938 -.3908  
315.000 -.4849 -.4821 -.4921

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 01+112+S12N25+AT10 SRM NOZZLE

ALPHA( 2 ) = -0.240 BETA( 7 ) = 4.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.4243 -.4201 -.4300  
45.000 -.4112 -.4217 -.4376  
90.000 -.4110 -.4196 -.4248  
135.000 -.4110 -.4136 -.4123  
180.000 -.4034 -.4073 -.4100  
225.000 -.4029 -.4128 -.4337  
270.000 -.4591 -.4365 -.4001  
315.000 -.4217 -.4311 -.4199

ALPHA( 2 ) = -0.220 BETA( 8 ) = 6.070

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.3742 -.3906 -.4039  
45.000 -.3677 -.3870 -.4146  
90.000 -.3781 -.3822 -.3947  
135.000 -.3904 -.3796 -.3833  
180.000 -.3812 -.3767 -.3724  
225.000 -.3731 -.3640 -.3667  
270.000 -.3745 -.3809 -.3805  
315.000 -.3979 -.4010 -.3969

ALPHA( 2 ) = -0.230 BETA( 9 ) = 8.080

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI  
.000 -.3845 -.3968 -.4149  
45.000 -.3649 -.3960 -.4146  
90.000 -.3866 -.3981 -.4068  
135.000 -.4012 -.3937 -.3971  
180.000 -.3921 -.3879 -.3910  
225.000 -.3777 -.3783 -.3714  
270.000 -.3829 -.3825 -.3811  
315.000 -.3863 -.3945 -.3801



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X32)

ARC:1-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 2 ) = -6.240 BETA( 10 ) = 10.100

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	.9480	.9790	.9930
PHI			
.000	-.3920	-.3996	-.4129
45.000	-.3868	-.4069	-.4264
90.000	-.3962	-.4157	-.4217
135.000	-.4189	-.4126	-.4139
180.000	-.4116	-.4123	-.4132
225.000	-.3941	-.3982	-.3864
270.000	-.3902	-.3930	-.3955
315.000	-.3912	-.3946	-.3875

ALPHA( 3 ) = -6.210 BETA( 1 ) = -10.020

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	.9480	.9790	.9930
PHI			
.000	-.5301	-.5436	-.5475
45.000	-.5389	-.5405	-.5527
90.000	-.5332	-.5402	-.5467
135.000	-.5291	-.5384	-.5444
180.000	-.5358	-.5419	-.5395
225.000	-.5317	-.5402	-.5380
270.000	-.5345	-.5348	-.5367
315.000	-.5438	-.5459	-.5421

ALPHA( 3 ) = -6.220 BETA( 2 ) = -7.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	.9480	.9790	.9930
PHI			
.000	-.5195	-.5303	-.5352
45.000	-.5190	-.5229	-.5399
90.000	-.5190	-.5277	-.5417
135.000	-.5185	-.5295	-.5360
180.000	-.5208	-.5236	-.5179
225.000	-.5197	-.5259	-.5218
270.000	-.5156	-.5253	-.5228
315.000	-.5205	-.5316	-.5275



DATE 06 JAN 75

ADJUSTED PRESSURE DATA - 1A14A - VOL. 9  
ARC11-716 1A14 01+112+512M25+AT10 SRM NOZZLE

(R01X32)

ALPHA: 3) = -6.230 BETA: (3) = -5.960

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
.000 -.5143 -.5239 -.5314  
49.000 -.5199 -.5257 -.5337  
90.000 -.5146 -.5260 -.5376  
135.000 -.5131 -.5275 -.5296  
180.000 -.5211 -.5249 -.5273  
225.000 -.5182 -.5237 -.5195  
270.000 -.5187 -.5213 -.5177  
315.000 -.5213 -.5293 -.5276

ALPHA: 3) = -6.120 BETA: (4) = -1.900

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
.000 -.5157 -.5227 -.5322  
49.000 -.5172 -.5289 -.5397  
90.000 -.5167 -.5276 -.5359  
135.000 -.5146 -.5232 -.5335  
180.000 -.5180 -.5214 -.5176  
225.000 -.5185 -.5195 -.5221  
270.000 -.5185 -.5346 -.5399  
315.000 -.5216 -.5250 -.5252

ALPHA: 3) = -5.130 BETA: (5) = .000

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
.000 -.4960 -.5069 -.5095  
49.000 -.4955 -.5063 -.5204  
90.000 -.4968 -.5095 -.5256  
135.000 -.4991 -.5095 -.5129  
180.000 -.5017 -.5044 -.4902  
225.000 -.4962 -.5013 -.5039  
270.000 -.4957 -.5127 -.4135  
315.000 -.5019 -.5018 -.5033

DATE 05 JAN 75 TABULATED PRESSURE DATA - 1414A - VOL. 9

(R81X32)

ARC11-715 1414 CR+12+512M25+AT10 50M NOZZLE

ALPHA DI 31 = -6.120 BETAD ( 6 ) = 2.030

SECTION ( 115M NOZZLE

K/L 9480 9790 9930

PMI

.000 -.4052 -.4727 -.4790  
45.000 -.4750 -.4759 -.4875  
90.000 -.4704 -.4630 -.4770  
135.000 -.4739 -.4764 -.4904  
180.000 -.4758 -.4721 -.4756  
225.000 -.4739 -.4670 -.4837  
270.000 -.4740 -.4668 -.4891  
315.000 -.4722 -.4615 -.4785

ALPHA DI 31 = -6.110 BETAD ( 7 ) = 4.060

SECTION ( 115M NOZZLE

K/L 9480 9790 9930

PMI

.000 -.4102 -.4206 -.4327  
45.000 -.4172 -.4177 -.4350  
90.000 -.4074 -.4101 -.4254  
135.000 -.4066 -.4091 -.4176  
180.000 -.4089 -.4143 -.4064  
225.000 -.4071 -.4060 -.4057  
270.000 -.4068 -.4254 -.4055  
315.000 -.4180 -.4265 -.4234

ALPHA DI 31 = -6.190 BETAD ( 8 ) = 6.080

SECTION ( 115M NOZZLE

K/L 9480 9790 9930

PMI

.000 -.3670 -.4017 -.4110  
45.000 -.3720 -.3940 -.4190  
90.000 -.3631 -.3675 -.4092  
135.000 -.3670 -.3632 -.3970  
180.000 -.3639 -.3659 -.3635  
225.000 -.3621 -.3772 -.3719  
270.000 -.3629 -.3670 -.3679  
315.000 -.3999 -.4033 -.3955



DATE 08 JAN 75 TABULATED PRESSURE DATA - IAT14 - VOL. 9

(R81X32)

ARC11-716 IAT14 OF+112+512M5+AT10 SRM NOZZLE

ALPHA(1 3) = -6.190 BETAD ( 9) = 6.090

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

R/L3 .9400 .9790 .9930

PMI			
.000	-.3849	-.3978	-.4097
45.000	-.3790	-.4046	-.4190
90.000	-.3867	-.4012	-.4128
135.000	-.4051	-.3934	-.3969
180.000	-.3973	-.3958	-.3999
225.000	-.3888	-.3865	-.3788
270.000	-.3803	-.3862	-.3788
315.000	-.3911	-.3953	-.3922

ALPHA(1 3) = -6.170 BETAD (10) = 10.090

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

R/L3 .9400 .9790 .9930

PMI			
.000	-.3986	-.4160	-.4127
45.000	-.3903	-.4146	-.4330
90.000	-.3986	-.4148	-.4330
135.000	-.4167	-.4120	-.4169
180.000	-.4219	-.4125	-.4111
225.000	-.4038	-.4104	-.3969
270.000	-.3953	-.4016	-.4057
315.000	-.4048	-.4022	-.3980

ALPHA(1 4) = -4.840 BETAD ( 1) = -10.010

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

R/L3 .9400 .9790 .9930

PMI			
.000	-.5269	-.5371	-.5345
45.000	-.5214	-.5355	-.5392
90.000	-.5248	-.5318	-.5415
135.000	-.5269	-.5280	-.5371
180.000	-.5289	-.5308	-.5317
225.000	-.5293	-.5308	-.5193
270.000	-.5253	-.5324	-.5206
315.000	-.5298	-.5319	-.5434

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 01+112+512N25+AT10 SRM NOZZLE (RB1X32)

ALPHA( 4 ) = -4.270 BETA( 2 ) = -8.020

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PMI  
 .000 -.5085 -.5221 -.5270  
 45.000 -.5101 -.5195 -.5288  
 90.000 -.5111 -.5213 -.5270  
 135.000 -.5121 -.5192 -.5249  
 180.000 -.5103 -.5155 -.5143  
 225.000 -.5121 -.5132 -.5114  
 270.000 -.5140 -.5218 -.5138  
 315.000 -.5174 -.5257 -.5257

ALPHA( 4 ) = -4.290 BETA( 3 ) = -5.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PMI  
 .000 -.5131 -.5225 -.5272  
 45.000 -.5126 -.5257 -.5299  
 90.000 -.5129 -.5207 -.5267  
 135.000 -.5123 -.5197 -.5278  
 180.000 -.5126 -.5215 -.5173  
 225.000 -.5121 -.5181 -.5115  
 270.000 -.5097 -.5105 -.5066  
 315.000 -.5142 -.5254 -.5162

ALPHA( 4 ) = -4.250 BETA( 4 ) = -3.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PMI  
 .000 -.5125 -.5216 -.5255  
 45.000 -.5140 -.5200 -.5318  
 90.000 -.5106 -.5240 -.5331  
 135.000 -.5156 -.5224 -.5300  
 180.000 -.5182 -.5224 -.5166  
 225.000 -.5177 -.5219 -.5161  
 270.000 -.5133 -.5224 -.4712  
 315.000 -.5166 -.5208 -.5231



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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(RB1X32)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 4) = -4.240 BETA( 5) = -1.960

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9400	.9790	.9930
RHI			
.000	-.5038	-.5067	-.5163
45.000	-.5043	-.5114	-.5215
90.000	-.5033	-.5095	-.5291
135.000	-.5025	-.5098	-.5228
180.000	-.5038	-.5098	-.5102
225.000	-.5043	-.5048	-.5066
270.000	-.5074	-.5132	-.4562
315.000	-.5048	-.5103	-.5112

ALPHA( 4) = -4.220 BETA( 6) = .020

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9400	.9790	.9930
RHI			
.000	-.4865	-.4944	-.4988
45.000	-.4865	-.4952	-.5084
90.000	-.4892	-.4988	-.5168
135.000	-.4881	-.4993	-.5056
180.000	-.4889	-.5006	-.4933
225.000	-.4907	-.5009	-.5006
270.000	-.4871	-.5001	-.3927
315.000	-.4889	-.4923	-.4954

ALPHA( 4) = -4.290 BETA( 7) = 2.020

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5	.9400	.9790	.9930
RHI			
.000	-.4805	-.4862	-.4720
45.000	-.4552	-.4691	-.4819
90.000	-.4662	-.4712	-.4900
135.000	-.4568	-.4720	-.4798
180.000	-.4588	-.4757	-.4706
225.000	-.4675	-.4822	-.4752
270.000	-.4662	-.4775	-.3988
315.000	-.4633	-.4684	-.4757

(R81X32)

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(D) (4) = -4.310 BETA(D) (8) = 4.040

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

THI

.000	-.4114	-.4205	-.4343
45.000	-.4041	-.4176	-.4304
90.000	-.4077	-.4077	-.4159
135.000	-.4051	-.4101	-.4163
180.000	-.4051	-.4028	-.4061
225.000	-.4129	-.4192	-.3939
270.000	-.4119	-.4319	-.3930
315.000	-.4197	-.4262	-.4203

ALPHA(D) (4) = -4.220 BETA(D) (9) = 8.080

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

THI

.000	-.3981	-.3999	-.4096
45.000	-.3811	-.3991	-.4264
90.000	-.3680	-.4020	-.4170
135.000	-.3926	-.3923	-.4023
180.000	-.3947	-.3933	-.3832
225.000	-.3887	-.3918	-.3923
270.000	-.3829	-.3987	-.3812
315.000	-.3939	-.3951	-.3812

ALPHA(D) (4) = -4.210 BETA(D) (10) = 10.100

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

THI

.000	-.4082	-.4174	-.4237
45.000	-.3975	-.4174	-.4469
90.000	-.3949	-.4148	-.4419
135.000	-.4106	-.4145	-.4216
180.000	-.4161	-.4122	-.4123
225.000	-.4085	-.4122	-.4045
270.000	-.4004	-.4054	-.4024
315.000	-.4022	-.4137	-.4017



DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A144 - VOL. 9

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ARC11-716 1A14 Or+T12+S12N25+AT10 SRM NOZZLE

(RB1X32)

ALPHA( 5) = -2.920 BETA( 1) = -10.000

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PMI

.000	-.5223	-.5317	-.5351
45.000	-.5207	-.5288	-.5351
90.000	-.5184	-.5304	-.5351
135.000	-.5228	-.5317	-.5309
180.000	-.5223	-.5275	-.5193
225.000	-.5223	-.5223	-.5180
270.000	-.5275	-.5367	-.5092
315.000	-.5338	-.5377	-.5403

ALPHA( 5) = -2.930 BETA( 2) = -8.000

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PMI

.000	-.5111	-.5156	-.5231
45.000	-.5114	-.5166	-.5282
90.000	-.5108	-.5166	-.5220
135.000	-.5054	-.5134	-.5231
180.000	-.5082	-.5114	-.5144
225.000	-.5082	-.5098	-.5043
270.000	-.5085	-.5181	-.4935
315.000	-.5134	-.5215	-.5264

ALPHA( 5) = -2.930 BETA( 3) = -5.970

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PMI

.000	-.5061	-.5168	-.5168
45.000	-.5058	-.5110	-.5186
90.000	-.5030	-.5087	-.5160
135.000	-.5033	-.5139	-.5184
180.000	-.5050	-.5095	-.5091
225.000	-.5033	-.5116	-.5050
270.000	-.5048	-.5108	-.4972
315.000	-.5069	-.5118	-.5151



(R81X32)

ARC11-716 IAL4 (X+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 5) = -2.910 BETA( 4) = -3.960

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.5012	-.5064	-.5145
45.000	-.5041	-.5101	-.5169
90.000	-.5022	-.5124	-.5245
135.000	-.5020	-.5145	-.5216
180.000	-.5043	-.5143	-.5074
225.000	-.5046	-.5135	-.5045
270.000	-.5030	-.5101	-.4656
315.000	-.5059	-.5138	-.5165

ALPHA( 5) = -2.910 BETA( 5) = -2.000

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.4925	-.4988	-.5066
45.000	-.4925	-.5004	-.5113
90.000	-.4925	-.5061	-.5118
135.000	-.4928	-.5040	-.5087
180.000	-.4978	-.5017	-.4977
225.000	-.4944	-.5024	-.4969
270.000	-.4946	-.5059	-.4425
315.000	-.4962	-.5022	-.5065

ALPHA( 5) = -2.910 BETA( 6) = .020

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.4832	-.4889	-.4952
45.000	-.4847	-.4962	-.5059
90.000	-.4847	-.4957	-.5103
135.000	-.4844	-.4975	-.5069
180.000	-.4899	-.4991	-.4904
225.000	-.4920	-.5004	-.4959
270.000	-.4878	-.5035	-.3918
315.000	-.4868	-.4915	-.4928



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 ON+T112+J12H25+AT10 SRM NOZZLE

ALPHA( 5 ) = -2.910 BETA( 7 ) = 2.050

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI			
.000	-.4610	-.4782	-.4772
45.000	-.4678	-.4803	-.4845
90.000	-.4678	-.4790	-.4897
135.000	-.4660	-.4780	-.4856
180.000	-.4714	-.4798	-.4724
225.000	-.4678	-.4827	-.4815
270.000	-.4733	-.4869	-.3792
315.000	-.4699	-.4801	-.4758

ALPHA( 5 ) = -2.920 BETA( 8 ) = 4.080

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI			
.000	-.4370	-.4469	-.4807
45.000	-.4333	-.4472	-.4584
90.000	-.4325	-.4383	-.4427
135.000	-.4338	-.4375	-.4438
180.000	-.4325	-.4385	-.4319
225.000	-.4354	-.4378	-.4392
270.000	-.4406	-.4472	-.4355
315.000	-.4459	-.4477	-.4449

ALPHA( 5 ) = -2.930 BETA( 9 ) = 6.070

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI			
.000	-.4085	-.4172	-.4297
45.000	-.4010	-.4174	-.4363
90.000	-.4064	-.4159	-.4263
135.000	-.4114	-.4133	-.4169
180.000	-.4138	-.4094	-.4042
225.000	-.4041	-.4012	-.3990
270.000	-.4085	-.4096	-.4141
315.000	-.4166	-.4154	-.4165

(R81X32)

ARC11-716 1A14 Q1+T12+S12N2 AT10 SRM NOZZLE

ALPHA( 5) = -2.920 BETA( 10) = 8.110

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L S .9480 .9790 .9930

PHI

.000	-.3798	-.3936	-.3994
45.000	-.3803	-.3938	-.4125
90.000	-.3798	-.3968	-.4117
135.000	-.3928	-.3950	-.4010
180.000	-.3938	-.3924	-.3848
225.000	-.3929	-.3898	-.3866
270.000	-.3824	-.3793	-.3830
315.000	-.3850	-.3856	-.3825

ALPHA( 5) = -2.900 BETA( 11) = 10.100

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L S .9480 .9790 .9930

PHI

.000	-.4092	-.4149	-.4212
45.000	-.4001	-.4188	-.4446
90.000	-.3988	-.4128	-.4368
135.000	-.4087	-.4115	-.4230
180.000	-.4121	-.4126	-.4099
225.000	-.4042	-.4073	-.4053
270.000	-.4053	-.4076	-.4123
315.000	-.4074	-.4149	-.4133

ALPHA( 6) = -.750 BETA( 1) = -10.040

DEPENDENT VARIABLE CP

SECTION ( 1)SRM NOZZLE

X/L S .9480 .9790 .9930

PHI

.000	-.5243	-.5303	-.5406
45.000	-.5245	-.5356	-.5353
90.000	-.5258	-.5308	-.5387
135.000	-.5188	-.5293	-.5287
180.000	-.5211	-.5290	-.5209
225.000	-.5240	-.5274	-.5222
270.000	-.5251	-.5366	-.5128
315.000	-.5324	-.5385	-.5363



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 01+712+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA( 6) = -.740 BETA( 2) = -8.040

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.3210 -.5221 -.5312  
 45.000 -.5067 -.5158 -.5276  
 90.000 -.5124 -.5176 -.5253  
 135.000 -.5093 -.5155 -.5231  
 180.000 -.5095 -.5121 -.5196  
 225.000 -.5101 -.5145 -.5104  
 270.000 -.5148 -.5291 -.4618  
 315.000 -.5210 -.5281 -.5315

ALPHA( 6) = -.720 BETA( 3) = -5.990

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.5047 -.5097 -.5102  
 45.000 -.5024 -.5110 -.5181  
 90.000 -.5003 -.5072 -.5212  
 135.000 -.4985 -.5084 -.5176  
 180.000 -.5003 -.5073 -.5077  
 225.000 -.5003 -.5042 -.5033  
 270.000 -.5019 -.5123 -.4625  
 315.000 -.5045 -.5123 -.5140

ALPHA( 6) = -.710 BETA( 4) = -3.980

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
 .000 -.4910 -.5001 -.5045  
 45.000 -.4894 -.4990 -.5094  
 90.000 -.4859 -.4982 -.5071  
 135.000 -.4912 -.5015 -.5074  
 180.000 -.4946 -.4985 -.5013  
 225.000 -.4923 -.4972 -.4997  
 270.000 -.4928 -.5100 -.4357  
 315.000 -.4907 -.5014 -.5168

ARC11-716 1A14 DI-T12-S12X25XAT10 SRM NOZZLE

(RB1X32)

ALPHA( 6 ) = -.700 BETA( 6 ) = -2.010

## SECTION 1: SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 3 .9480 .9790 .9930

Y/L

.000	-.4856	-.4911	-.4963
45.000	-.4858	-.4953	-.5029
90.000	-.4861	-.4916	-.5062
135.000	-.4864	-.4927	-.5031
180.000	-.4877	-.4928	-.4910
225.000	-.4877	-.4938	-.4944
270.000	-.4869	-.4947	-.4879
315.000	-.4848	-.4971	-.4826

ALPHA( 6 ) = -.600 BETA( 6 ) = .040

## SECTION 1: SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 3 .9480 .9790 .9930

Y/L

.000	-.4805	-.4780	-.4899
45.000	-.4799	-.4860	-.4956
90.000	-.4792	-.4862	-.5003
135.000	-.4794	-.4850	-.4977
180.000	-.4789	-.4821	-.4879
225.000	-.4794	-.4813	-.4917
270.000	-.4794	-.4940	-.4985
315.000	-.4789	-.4855	-.4937

ALPHA( 6 ) = -.600 BETA( 6 ) = 2.030

## SECTION 1: SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 3 .9480 .9790 .9930

Y/L

.000	-.4662	-.4691	-.4744
45.000	-.4665	-.4681	-.4708
90.000	-.4668	-.4695	-.4831
135.000	-.4668	-.4661	-.4807
180.000	-.4662	-.4697	-.4742
225.000	-.4673	-.4723	-.4740
270.000	-.4616	-.4735	-.4829
315.000	-.4642	-.4653	-.4720



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-710 1A14 Q1-T12+S12N25+T110 SRM NOZZLE

(R81X32)

ALPHA( 8) = -.710 BETA( 8) = 4.060

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI  
 .000 -.4204 -.4225 -.4358  
 45.000 -.4164 -.4353 -.4473  
 90.000 -.4164 -.4290 -.4480  
 135.000 -.4183 -.4219 -.4353  
 180.000 -.4203 -.4235 -.4199  
 225.000 -.4236 -.4332 -.4156  
 270.000 -.4198 -.4337 -.3762  
 315.000 -.4230 -.4267 -.4225

ALPHA( 8) = -.720 BETA( 8) = 6.080

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI  
 .000 -.3849 -.4131 -.4180  
 45.000 -.3356 -.4079 -.4301  
 90.000 -.3979 -.4087 -.4272  
 135.000 -.4058 -.4115 -.4105  
 180.000 -.4086 -.4033 -.4026  
 225.000 -.3969 -.4019 -.4050  
 270.000 -.3965 -.3964 -.3974  
 315.000 -.4003 -.4030 -.4029

ALPHA( 8) = -.750 BETA( 8) = 8.100

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI  
 .000 -.3959 -.3987 -.4096  
 45.000 -.3886 -.4052 -.4229  
 90.000 -.3850 -.4049 -.4190  
 135.000 -.3959 -.4026 -.4075  
 180.000 -.4037 -.3992 -.3998  
 225.000 -.3946 -.3956 -.3933  
 270.000 -.3930 -.3948 -.3935  
 315.000 -.3974 -.4021 -.3954

(R81X32)

AEC11-716 IAI- 01+712+512N25+AT10 SRM NOZZLE

ALPHA( 6 ) = -.740 BETAD (11) = 10.180

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PMI

.000	-.4063	.4248	-.4233
45.000	-.4071	-.4248	-.4418
90.000	-.3979	-.4180	-.4319
135.000	-.4003	-.4126	-.4230
180.000	-.4089	-.4121	-.4118
225.000	-.4024	-.4077	-.4079
270.000	-.4081	-.4056	-.4064
315.000	-.4136	-.4152	-.4064

ALPHA( 7 ) = 2.030 BETAD ( 1 ) = -10.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PMI

.000	-.5093	-.5180	-.5261
45.000	-.5078	-.5192	-.5253
90.000	-.5059	-.5135	-.5229
135.000	-.5114	-.5150	-.5211
180.000	-.5143	-.5219	-.5092
225.000	-.5140	-.5132	-.5105
270.000	-.5119	-.5193	-.5040
315.000	-.5185	-.5193	-.5230

ALPHA( 7 ) = 2.080 BETAD ( 2 ) = -8.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

PMI

.000	-.5093	-.5178	-.5306
45.000	-.5032	-.5175	-.5277
90.000	-.5148	-.5144	-.5253
135.000	-.5066	-.5128	-.5153
180.000	-.5100	-.5097	-.5184
225.000	-.5144	-.5068	-.5022
270.000	-.5089	-.5144	-.4674
315.000	-.5126	-.5217	-.5237



DATE 06 JAN 75 TAGLATED PRESSURE DATA - 1A14A - VOL. 9

(R01X32)

ARC11-716 1A14 06+712-S12N25+AT10 SRM NOZZLE

ALPHA( 7) = 2.000 BETA( 5) = -5.990

SECTION ( 1) SRM NOZZLE

X/LS .9400 .9790 .9930

PMI  
.000 -.4978 -.5038 -.5156  
45.000 -.4931 -.5038 -.5171  
90.000 -.4978 -.4999 -.5153  
135.000 -.4937 -.5038 -.5164  
180.000 -.4984 -.5030 -.5046  
225.000 -.4950 -.5030 -.4992  
270.000 -.5052 -.5177 -.4245  
315.000 -.5012 -.5153 -.5166

ALPHA( 7) = 1.960 BETA( 4) = -4.010

SECTION ( 1) SRM NOZZLE

X/LS .9400 .9790 .9930

PMI  
.000 -.4859 -.4924 -.4958  
45.000 -.4835 -.4921 -.4984  
90.000 -.4815 -.4877 -.5015  
135.000 -.4815 -.4909 -.4997  
180.000 -.4864 -.4893 -.4937  
225.000 -.4880 -.4870 -.4911  
270.000 -.4846 -.4990 -.4259  
315.000 -.4888 -.4940 -.4950

ALPHA( 7) = 1.990 BETA( 5) = -2.000

SECTION ( 1) SRM NOZZLE

X/LS .9400 .9790 .9930

PMI  
.000 -.4864 -.4729 -.4833  
45.000 -.4866 -.4737 -.4874  
90.000 -.4851 -.4728 -.4861  
135.000 -.4690 -.4786 -.4864  
180.000 -.4737 -.4778 -.4803  
225.000 -.4759 -.4755 -.4780  
270.000 -.4716 -.4795 -.4285  
315.000 -.4692 -.4760 -.4769



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TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 OR-T112-S12M25-AT10 SRM NOZZLE

(R01X3?)

ALPHA ( 7 ) = 1.930 BETA ( 6 ) = .040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 .9790 .9930

M/L	0.9400	.9790	.9930
CP			
.000	-.4573	-.4615	-.4717
45.000	-.4557	-.4641	-.4693
90.000	-.4565	-.4636	-.4759
135.000	-.4561	-.4655	-.4795
180.000	-.4649	-.4654	-.4683
225.000	-.4649	-.4591	-.4694
270.000	-.4578	-.4714	-.3866
315.000	-.4573	-.4618	-.4668

ALPHA ( 7 ) = 1.930 BETA ( 7 ) = 2.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 .9790 .9930

M/L	0.9400	.9790	.9930
CP			
.000	-.4507	-.4559	-.4625
45.000	-.4489	-.4590	-.4610
90.000	-.4494	-.4560	-.4643
135.000	-.4507	-.4552	-.4564
180.000	-.4575	-.4597	-.4602
225.000	-.4536	-.4581	-.4636
270.000	-.4471	-.4602	-.4083
315.000	-.4499	-.4547	-.4575

ALPHA ( 7 ) = 1.930 BETA ( 8 ) = 4.070

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 .9790 .9930

M/L	0.9400	.9790	.9930
CP			
.000	-.4466	-.4631	-.4802
45.000	-.4422	-.4610	-.4696
90.000	-.4484	-.4595	-.4670
135.000	-.4492	-.4526	-.4605
180.000	-.4479	-.4534	-.4516
225.000	-.4492	-.4485	-.4490
270.000	-.4404	-.4555	-.4381
315.000	-.4523	-.4529	-.4506



DATE 08 JAN 75 TABULATED PRESSURE DATA - IAI14A - VOL. 9

(RB1X32)

ARC11-716 IAI14 OR-T12-S12M23-AT110 SRM NOZZLE

ALPHA(7) = 1.900 BETA(8) = 6.100

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

IN1			
.000	-.4408	-.4442	-.4806
45.000	-.4358	-.4478	-.4645
90.000	-.4397	-.4491	-.4561
135.000	-.4439	-.4512	-.4504
180.000	-.4442	-.4501	-.4439
225.000	-.4379	-.4426	-.4426
270.000	-.4353	-.4389	-.4452
315.000	-.4421	-.4462	-.4449

ALPHA(7) = 1.950 BETA(10) = 8.100

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

IN1			
.000	-.4116	-.4163	-.4298
45.000	-.4061	-.4199	-.4438
90.000	-.4012	-.4129	-.4308
135.000	-.4067	-.4168	-.4225
180.000	-.4082	-.4157	-.4132
225.000	-.4025	-.4117	-.4063
270.000	-.3994	-.4100	-.4117
315.000	-.4065	-.4202	-.4119

ALPHA(7) = 1.940 BETA(11) = 10.140

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5 .9480 .9790 .9930

IN1			
.000	-.4175	-.4255	-.4287
45.000	-.4144	-.4199	-.4451
90.000	-.4089	-.4206	-.4378
135.000	-.4121	-.4284	-.4320
180.000	-.4238	-.4214	-.4241
225.000	-.4131	-.4196	-.4184
270.000	-.4121	-.4151	-.4093
315.000	-.4162	-.4203	-.4142

AR 1-716 1A14 01+112+S12N25+AT10 SRM NOZZLE

(R81X32)

ALPHA( 8 ) = 3.970 BETA( 1 ) = -9.950

## SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4946 -.4999 -.5079  
 45.000 -.4894 -.5085 -.5155  
 90.000 -.4931 -.5025 -.5111  
 135.000 -.4946 -.5027 -.5043  
 180.000 -.5012 -.5022 -.4919  
 225.000 -.4912 -.4967 -.4945  
 270.000 -.4920 -.4978 -.4932  
 315.000 -.4980 -.5025 -.4992

ALPHA( 8 ) = 3.990 BETA( 2 ) = -8.000

## SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.5068 -.5136 -.5201  
 45.000 -.5029 -.5039 -.5230  
 90.000 -.5023 -.5099 -.5201  
 135.000 -.5034 -.5089 -.5159  
 180.000 -.5037 -.5078 -.5051  
 225.000 -.5018 -.5073 -.5009  
 270.000 -.5060 -.5130 -.4856  
 315.000 -.5102 -.5149 -.5111

ALPHA( 8 ) = 3.970 BETA( 3 ) = -6.020

## SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.4960 -.5039 -.5068  
 45.000 -.4929 -.5023 -.5110  
 90.000 -.4947 -.4955 -.5097  
 135.000 -.4958 -.4968 -.4989  
 180.000 -.4945 -.4976 -.4985  
 225.000 -.4924 -.4953 -.4967  
 270.000 -.4945 -.5013 -.4540  
 315.000 -.4989 -.5023 -.5045



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X32)

ARC11-716 1A14 OR T112+S12N25+AT10 SRM NOZZLE

ALPHAO ( 8 ) = 3.930 BETAO ( 4 ) = -3.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI  
.000 -.4793 -.4879 -.4928  
45.000 -.4829 -.4897 -.4986  
90.000 -.4759 -.4819 -.4908  
135.000 -.4736 -.4832 -.4913  
180.000 -.4780 -.4858 -.4881  
225.000 -.4824 -.4845 -.4883  
270.000 -.4803 -.4897 -.4344  
315.000 -.4787 -.4835 -.4837

ALPHAO ( 8 ) = 3.930 BETAO ( 5 ) = -2.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI  
.000 -.4692 -.4739 -.4833  
45.000 -.4656 -.4773 -.4841  
90.000 -.4666 -.4689 -.4807  
135.000 -.4710 -.4736 -.4854  
180.000 -.4687 -.4765 -.4805  
225.000 -.4695 -.4739 -.4740  
270.000 -.4700 -.4765 -.4378  
315.000 -.4663 -.4768 -.4755

ALPHAO ( 8 ) = 3.940 BETAO ( 6 ) = .040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9400 .9790 .9930

PHI  
.000 -.4567 -.4643 -.4721  
45.000 -.4532 -.4640 -.4742  
90.000 -.4506 -.4604 -.4667  
135.000 -.4578 -.4643 -.4729  
180.000 -.4619 -.4656 -.4644  
225.000 -.4601 -.4638 -.4667  
270.000 -.4575 -.4641 -.4177  
315.000 -.4552 -.4648 -.4615

ARC11-715 1A14 01+T112+512M25+AT10 SRM NOZZLE

(R81X32)

ALPHA( 8 ) = 4.030 BETA( 7 ) = 2.050

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4622	-.4711	-.4771
45.000	-.4604	-.4674	-.4839
90.000	-.4599	-.4683	-.4698
135.000	-.4573	-.4714	-.4813
180.000	-.4690	-.4678	-.4692
225.000	-.4643	-.4722	-.4729
270.000	-.4648	-.4732	-.4155
315.000	-.4656	-.4654	-.4672

ALPHA( 8 ) = 4.020 BETA( 8 ) = 4.070

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4424	-.4489	-.4581
45.000	-.4400	-.4534	-.4646
90.000	-.4346	-.4469	-.4565
135.000	-.4479	-.4552	-.4605
180.000	-.4442	-.4513	-.4466
225.000	-.4419	-.4597	-.4455
270.000	-.4440	-.4599	-.3925
315.000	-.4458	-.4466	-.4489

ALPHA( 8 ) = 4.010 BETA( 9 ) = 6.080

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4509	-.4341	-.4440
45.000	-.4252	-.4349	-.4558
90.000	-.4249	-.4289	-.4484
135.000	-.4257	-.4310	-.4511
180.000	-.4278	-.4333	-.4317
225.000	-.4244	-.4317	-.4278
270.000	-.4228	-.4276	-.4177
315.000	-.4286	-.4263	-.4336



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 C1+12+512+25+AT10 SRM NOZZLE (R81X32)

ALPHA( 8 ) = 4.060 BETA( 10 ) = 8.110  
 SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4230	-.4298	-.4397
45.000	-.4141	-.4293	-.4501
90.000	-.4073	-.4222	-.4423
135.000	-.4162	-.4225	-.4407
180.000	-.4225	-.4201	-.4275
225.000	-.4207	-.4136	-.4182
270.000	-.4167	-.4131	-.4135
315.000	-.4175	-.4209	-.4192

ALPHA( 8 ) = 4.050 BETA( 11 ) = 10.160

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4180	-.4242	-.4331
45.000	-.4099	-.4235	-.4366
90.000	-.4073	-.4222	-.4414
135.000	-.4155	-.4222	-.4409
180.000	-.4224	-.4315	-.4293
225.000	-.4164	-.4248	-.4235
270.000	-.4073	-.4102	-.4093
315.000	-.4125	-.4164	-.4140

ALPHA( 9 ) = 5.980 BETA( 1 ) = -9.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4832	-.4892	-.4988
45.000	-.4826	-.4967	-.5032
90.000	-.4793	-.4933	-.5019
135.000	-.4858	-.4928	-.5022
180.000	-.4881	-.4902	-.4906
225.000	-.4884	-.4905	-.4852
270.000	-.4829	-.4897	-.4810
315.000	-.4892	-.4933	-.4905

DATE 08 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(R81X32)

ARC1:-716 IA14 Q1+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 9 ) = 5.960 BETA( 2 ) = -7.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0200 -.4904 -.4946 -.5019  
45.000 -.4891 -.4957 -.5092  
90.000 -.4942 -.4990 -.5092  
135.000 -.4888 -.4933 -.5034  
180.000 -.4891 -.4886 -.4875  
225.000 -.4849 -.4862 -.4867  
270.000 -.4881 -.4943 -.4820  
315.000 -.4915 -.4985 -.4935

ALPHA( 9 ) = 5.940 BETA( 3 ) = -5.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0000 -.4923 -.4970 -.5050  
45.000 -.4894 -.5011 -.5134  
90.000 -.4881 -.4954 -.5082  
135.000 -.4910 -.4920 -.4925  
180.000 -.4917 -.4910 -.4888  
225.000 -.4923 -.4949 -.4932  
270.000 -.4902 -.4938 -.4897  
315.000 -.4972 -.4965 -.4976

ALPHA( 9 ) = 5.960 BETA( 4 ) = -3.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0000 -.4838 -.4905 -.4992  
45.000 -.4817 -.4890 -.5067  
90.000 -.4812 -.4901 -.5036  
135.000 -.4835 -.4830 -.4875  
180.000 -.4856 -.4880 -.4899  
225.000 -.4879 -.4901 -.4899  
270.000 -.4788 -.4914 -.4522  
315.000 -.4951 -.4906 -.4925



DATE 06 JAN 73 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X32)

ARC11-716 1A14 01+T12+S12N23+AT10 SRM NOZZLE

ALPHA( 9 ) = 5.970 BETA( 5 ) = -1.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/L5 .9480 .9790 .9930

RNI			
.000	-.4705	-.4796	-.4895
45.000	-.4721	-.4812	-.4916
90.000	-.4710	-.4731	-.4846
135.000	-.4731	-.4768	-.4799
180.000	-.4742	-.4804	-.4844
225.000	-.4723	-.4786	-.4813
270.000	-.4708	-.4807	-.4553
315.000	-.4760	-.4809	-.4833

ALPHA( 9 ) = 5.980 BETA( 6 ) = .030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/L5 .9480 .9790 .9930

RNI			
.000	-.4725	-.4806	-.4915
45.000	-.4722	-.4795	-.4990
90.000	-.4707	-.4818	-.4860
135.000	-.4764	-.4779	-.4816
180.000	-.4733	-.4831	-.4876
225.000	-.4767	-.4803	-.4840
270.000	-.4717	-.4950	-.4183
315.000	-.4707	-.4778	-.4824

ALPHA( 9 ) = 5.970 BETA( 7 ) = 2.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE C<sub>p</sub>

X/L5 .9480 .9790 .9930

RNI			
.000	-.4717	-.4767	-.4871
45.000	-.4694	-.4769	-.4759
90.000	-.4629	-.4751	-.4832
135.000	-.4639	-.4744	-.4858
180.000	-.4710	-.4754	-.4759
225.000	-.4736	-.4777	-.4790
270.000	-.4686	-.4777	-.4170
315.000	-.4710	-.4752	-.4720



ARC11-716 1A14 01+112+512N25+AT10 SRM NOZZLE

(RB1X32)

ALPHA( 9 ) = 5.950 BETA( 8 ) = 4.080

SECTION ( 1 ) SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI

.000	-.4548	-.4623	-.4690
45.000	-.4522	-.4628	-.4753
90.000	-.4472	-.4571	-.4636
135.000	-.4511	-.4579	-.4641
180.000	-.4532	-.4568	-.4538
225.000	-.4542	-.4625	-.4590
270.000	-.4522	-.4654	-.4154
315.000	-.4553	-.4586	-.4584

ALPHA( 9 ) = 5.940 BETA( 9 ) = 6.100

SECTION ( 1 ) SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI

.000	-.4524	-.4582	-.4670
45.000	-.4517	-.4610	-.4777
90.000	-.4439	-.4540	-.4626
135.000	-.4485	-.4509	-.4623
180.000	-.4478	-.4587	-.4517
225.000	-.4488	-.4524	-.4478
270.000	-.4496	-.4553	-.4431
315.000	-.4511	-.4576	-.4537

ALPHA( 9 ) = 5.920 BETA( 10 ) = 6.130

SECTION ( 1 ) SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9400 .9790 .9930

PHI

.000	-.4375	-.4493	-.4633
45.000	-.4375	-.4516	-.4750
90.000	-.4284	-.4422	-.4531
135.000	-.4315	-.4380	-.4417
180.000	-.4313	-.4349	-.4322
225.000	-.4315	-.4307	-.4322
270.000	-.4357	-.4401	-.4406
315.000	-.4443	-.4476	-.4460



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 Q1+T12+S12N23+AT10 SRM NOZZLE

ALPHA( 9 ) = 5.980 BETA( 11 ) = 10.150

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
 .000 -.4464 -.4524 -.4661  
 45.000 -.4456 -.4540 -.4726  
 90.000 -.4344 -.4434 -.4533  
 135.000 -.4334 -.4429 -.4502  
 180.000 -.4383 -.4429 -.4473  
 225.000 -.4355 -.4390 -.4403  
 270.000 -.4396 -.4460 -.4395  
 315.000 -.4480 -.4468 -.4442

ALPHA(10) = 8.080 BETA( 1 ) = -9.950

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
 .000 -.4748 -.4912 -.4978  
 45.000 -.4748 -.4965 -.4988  
 90.000 -.4766 -.4923 -.5048  
 135.000 -.4876 -.4949 -.4588  
 180.000 -.4886 -.4980 -.4838  
 225.000 -.4842 -.4899 -.4737  
 270.000 -.4839 -.4881 -.4774  
 315.000 -.4834 -.4917 -.4846

ALPHA(10) = 8.110 BETA( 2 ) = -7.950

SECTION ( 1 ) SRM NOZZLE

X/L5 .9480 .9790 .9930

PHI  
 .000 -.4865 -.4979 -.5046  
 45.000 -.4860 -.4982 -.5054  
 90.000 -.4854 -.5020 -.5126  
 135.000 -.4906 -.4986 -.5095  
 180.000 -.4922 -.4950 -.4920  
 225.000 -.4919 -.4942 -.4859  
 270.000 -.4896 -.4958 -.4833  
 315.000 -.4880 -.5002 -.4926

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X32)

ARC11-716 1A14 0A-T12-S12N25-A110 SRM NOZZLE

ALPHAC(10) = 0.130 BETA( 3) = -3.940

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI  
.000 -.4898 -.5010 -.5143  
45.000 -.4929 -.5023 -.5156  
90.000 -.4908 -.5086 -.5224  
135.000 -.4992 -.5023 -.5117  
180.000 -.5005 -.4971 -.4948  
225.000 -.4953 -.4989 -.4894  
270.000 -.4971 -.4997 -.4863  
315.000 -.4984 -.5070 -.4969

ALPHAC(10) = 7.980 BETA( 4) = -3.970

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI  
.000 -.4898 -.5034 -.5164  
45.000 -.4945 -.5039 -.5213  
90.000 -.4997 -.5015 -.5205  
135.000 -.5002 -.4976 -.5067  
180.000 -.4949 -.4992 -.4951  
225.000 -.4935 -.5010 -.4951  
270.000 -.4911 -.5049 -.4809  
315.000 -.4982 -.5044 -.5034

ALPHAC(10) = 0.010 BETA( 5) = -1.970

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PHI  
.000 -.4982 -.4985 -.5118  
45.000 -.4954 -.5009 -.5196  
90.000 -.4850 -.4954 -.5102  
135.000 -.4845 -.4915 -.4923  
180.000 -.4905 -.4957 -.4950  
225.000 -.4873 -.4889 -.4932  
270.000 -.4907 -.4988 -.4730  
315.000 -.4949 -.4993 -.4979



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(881X32)

ARC11-716 1A14 CR+T12+S12N25+AT10 SRM NOZZLE

ALPHAC(10) = 7.930 BETAD ( 5) = .060

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L3 .9480 .9790 .9930

PM1  
.000 -.4036 -.4972 -.5065  
45.000 -.4001 -.5000 -.5138  
90.000 -.4036 -.4977 -.5107  
135.000 -.4029 -.4991 -.4992  
180.000 -.4910 -.4938 -.4866  
225.000 -.4063 -.4914 -.4902  
270.000 -.4079 -.5016 -.4553  
315.000 -.4936 -.4956 -.4904

ALPHAC(10) = 7.970 BETAD ( 7) = 2.050

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L3 .9480 .9790 .9930

PM1  
.000 -.4052 -.4924 -.5012  
45.000 -.4952 -.4989 -.5125  
90.000 -.4047 -.4090 -.5014  
135.000 -.4039 -.4057 -.4909  
180.000 -.4047 -.4803 -.4853  
225.000 -.4052 -.4862 -.4887  
270.000 -.4036 -.4919 -.4625  
315.000 -.4000 -.4700 -.4894

ALPHAC(10) = 7.950 BETAD ( 8) = 4.080

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L3 .9480 .9790 .9930

PM1  
.000 -.4703 -.4782 -.4854  
45.000 -.4674 -.4813 -.4965  
90.000 -.4635 -.4751 -.4919  
135.000 -.4681 -.4692 -.4759  
180.000 -.4609 -.4717 -.4680  
225.000 -.4638 -.4741 -.4644  
270.000 -.4674 -.4790 -.4369  
315.000 -.4692 -.4738 -.4719

(R01X32)

ARC11-716 IAI4 C1+T12+S12N25-KAT10 SRM NOZZLE

ALMAO(10) = 7.920 BETAD (9) = 6.110

SECTION (1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/L	.9400	.9700	.9930
741			
.000	-.4592	-.4773	-.4861
45.000	-.4509	-.4729	-.4998
90.000	-.4608	-.4644	-.4835
135.000	-.4567	-.4619	-.4691
180.000	-.4584	-.4603	-.4548
225.000	-.4554	-.4513	-.4505
270.000	-.4621	-.4709	-.4590
315.000	-.4736	-.4763	-.4652

ALMAO(10) = 7.910 BETAD (10) = 6.160

SECTION (1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/L	.9400	.9700	.9930
741			
.000	-.4531	-.4603	-.4698
45.000	-.4438	-.4806	-.4816
90.000	-.4420	-.4541	-.4736
135.000	-.4487	-.4494	-.4620
180.000	-.4508	-.4452	-.4480
225.000	-.4438	-.4404	-.4390
270.000	-.4402	-.4346	-.4470
315.000	-.4554	-.4551	-.4534

ALMAO(10) = 8.080 BETAD (11) = 10.180

SECTION (1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/L	.9400	.9700	.9930
741			
.000	-.4556	-.4654	-.4769
45.000	-.4461	-.4687	-.4900
90.000	-.4458	-.4570	-.4799
135.000	-.4904	-.4908	-.4578
180.000	-.4520	-.4529	-.4547
225.000	-.4466	-.4475	-.4473
270.000	-.4512	-.4575	-.4493
315.000	-.4595	-.4622	-.4596



DATE 08 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X32)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(11) = 10.040 BETA( 1 ) = -9.930

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.4796 -.4809 -.4871  
45.000 -.4812 -.4848 -.4945  
90.000 -.4791 -.4886 -.4989  
135.000 -.4817 -.4963 -.5058  
180.000 -.4915 -.4976 -.4921  
225.000 -.4861 -.4925 -.4896  
270.000 -.4789 -.4835 -.4814  
315.000 -.4735 -.4759 -.4760

ALPHA(11) = 9.930 BETA( 2 ) = -7.950

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.4916 -.5023 -.5001  
45.000 -.4882 -.5003 -.5108  
90.000 -.4877 -.5083 -.5157  
135.000 -.4967 -.5067 -.5201  
180.000 -.4975 -.5062 -.5033  
225.000 -.4960 -.5016 -.4954  
270.000 -.4903 -.4980 -.4898  
315.000 -.4877 -.4995 -.4870

ALPHA(11) = 9.960 BETA( 3 ) = -5.920

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.5013 -.5082 -.5123  
45.000 -.5003 -.5103 -.5239  
90.000 -.4998 -.5134 -.5329  
135.000 -.5038 -.5129 -.5244  
180.000 -.5026 -.5067 -.5065  
225.000 -.5034 -.5039 -.5074  
270.000 -.4964 -.5016 -.4980  
315.000 -.5026 -.5034 -.5049

ARC11-716 IA14 OA-T12-S12N25+AT10 SRN NOZZLE

(RB1X32)

ALPHA(11) = 9.900 BETA( 4) = -3.970

SECTION 11 SRN NOZZLE  
DEPENDENT VARIABLE CP

X/L3 .9400 .9700 .9930

PMI	.000	-.5139	-.5106	-.5273
45.000	-.5134	-.5224	-.5368	
90.000	-.5134	-.5265	-.5445	
135.000	-.5134	-.5190	-.5281	
180.000	-.5134	-.5152	-.5132	
225.000	-.5134	-.5132	-.5119	
270.000	-.5090	-.5109	-.5075	
315.000	-.5150	-.5179	-.5126	

ALPHA(11) = 9.950 BETA( 5) = -1.970

SECTION 11 SRN NOZZLE  
DEPENDENT VARIABLE CP

X/L3 .9400 .9700 .9930

PMI	.000	-.4967	-.4916	-.5026
45.000	-.4974 <td>-.5031 <td>-.5174</td> <td></td> </td>	-.5031 <td>-.5174</td> <td></td>	-.5174	
90.000	-.4974 <td>-.5077 <td>-.5215</td> <td></td> </td>	-.5077 <td>-.5215</td> <td></td>	-.5215	
135.000	-.4974 <td>-.4931 <td>-.5059</td> <td></td> </td>	-.4931 <td>-.5059</td> <td></td>	-.5059	
180.000	-.4974 <td>-.4902 <td>-.4902</td> <td></td> </td>	-.4902 <td>-.4902</td> <td></td>	-.4902	
225.000	-.4947 <td>-.4911 <td>-.4884</td> <td></td> </td>	-.4911 <td>-.4884</td> <td></td>	-.4884	
270.000	-.4974 <td>-.4904 <td>-.4816</td> <td></td> </td>	-.4904 <td>-.4816</td> <td></td>	-.4816	
315.000	-.4967 <td>-.4937 <td>-.4939</td> <td></td> </td>	-.4937 <td>-.4939</td> <td></td>	-.4939	

ALPHA(11) = 9.950 BETA( 6) = .030

SECTION 11 SRN NOZZLE  
DEPENDENT VARIABLE CP

X/L3 .9400 .9700 .9930

PMI	.000	-.4837	-.4924	-.4990
45.000	-.4829 <td>-.4950 <td>-.5126</td> <td></td> </td>	-.4950 <td>-.5126</td> <td></td>	-.5126	
90.000	-.4837 <td>-.4972 <td>-.5121</td> <td></td> </td>	-.4972 <td>-.5121</td> <td></td>	-.5121	
135.000	-.4834 <td>-.4895 <td>-.4967</td> <td></td> </td>	-.4895 <td>-.4967</td> <td></td>	-.4967	
180.000	-.4803 <td>-.4865 <td>-.4820</td> <td></td> </td>	-.4865 <td>-.4820</td> <td></td>	-.4820	
225.000	-.4827 <td>-.4877 <td>-.4820</td> <td></td> </td>	-.4877 <td>-.4820</td> <td></td>	-.4820	
270.000	-.4829 <td>-.4839 <td>-.4841</td> <td></td> </td>	-.4839 <td>-.4841</td> <td></td>	-.4841	
315.000	-.4965 <td>-.4900 <td>-.4864</td> <td></td> </td>	-.4900 <td>-.4864</td> <td></td>	-.4864	



TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X32)

ARC11-716 1A14 CR-112-S12N25-AT10 SHM NOZZLE

ALPHA(11) = 9.950 BETA( 7) = 2.080

SECTION (1)SRM NOZZLE

77 S 9400 9790 9930

77 S	9400	9790	9930
45.000	-4829	-4944	-4914
90.000	-4811	-4962	-5037
135.000	-4793	-4980	-5109
180.000	-4776	-4976	-5197
225.000	-4751	-4966	-5287
270.000	-4729	-4952	-5378
315.000	-4709	-4938	-5471

ALPHA(11) = 9.980 BETA( 8) = 4.000

SECTION (1)SRM NOZZLE

77 S 9400 9790 9930

77 S	9400	9790	9930
45.000	-4800	-4711	-4667
90.000	-4672	-4793	-5016
135.000	-4682	-4787	-5032
180.000	-4652	-4719	-4819
225.000	-4675	-4731	-4662
270.000	-4610	-4720	-4654
315.000	-4637	-4712	-4710

ALPHA(11) = 10.040 BETA( 9) = 6.140

SECTION (1)SRM NOZZLE

77 S 9400 9790 9930

77 S	9400	9790	9930
45.000	-4695	-4826	-4920
90.000	-4618	-4811	-5064
135.000	-4582	-4799	-4987
180.000	-4624	-4781	-4709
225.000	-4661	-4747	-4683
270.000	-4675	-4663	-4596
315.000	-4656	-4689	-4584



ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE

(RB1X32)

ALPHA(11) = 10.030 BETA(11) = 8.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4570	-.4665	-.4699
45.000	-.4508	-.4722	-.4877
90.000	-.4529	-.4569	-.4905
135.000	-.4622	-.4568	-.4607
180.000	-.4596	-.4573	-.4563
225.000	-.4568	-.4555	-.4486
270.000	-.4552	-.4607	-.4537
315.000	-.4622	-.4596	-.4568

ALPHA(11) = 10.070 BETA(11) = 10.230

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4469	-.4584	-.4686
45.000	-.4385	-.4609	-.4786
90.000	-.4479	-.4602	-.4829
135.000	-.4604	-.4526	-.4618
180.000	-.4604	-.4526	-.4521
225.000	-.4472	-.4505	-.4478
270.000	-.4449	-.4541	-.4478
315.000	-.4525	-.4505	-.4496

DATE 08 JAN 75 TABULATED PRESSURE DATA -- 1A14A - VOL. 9

ARC11-716 1A14 01-112+512M25+AT10 SRM NOZZLE (RB1X33) ( 17 APR 74 )

PARAMETRIC DATA  
MACH = 1.250 ELEVON = .000  
RUDDER = .000 SPDRK = .000

REFERENCE DATA

SRF = 2.4210 SQ. FT. XMRP = 29.5800 INCHES  
LREF = 38.7090 INCHES YMRP = .0000 INCHES  
BRF = 38.7090 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

ALPHA( 1 ) = -10.340 BETA( 1 ) = -9.910

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0000 -.4803 -.4846 -.4836  
45.0000 -.4724 -.4733 -.4861  
90.0000 -.4703 -.4754 -.4868  
135.0000 -.4695 -.4731 -.4836  
180.0000 -.4677 -.4770 -.4800  
225.0000 -.4738 -.4789 -.4753  
270.0000 -.4732 -.4736 -.4648  
315.0000 -.4790 -.4898 -.4553

ALPHA( 1 ) = -10.260 BETA( 2 ) = -7.920

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0000 -.4647 -.4711 -.4703  
45.0000 -.4584 -.4642 -.4758  
90.0000 -.4555 -.4613 -.4766  
135.0000 -.4550 -.4603 -.4758  
180.0000 -.4579 -.4640 -.4639  
225.0000 -.4584 -.4653 -.4576  
270.0000 -.4574 -.4629 -.4476  
315.0000 -.4605 -.4734 -.4327

ALPHA( 1 ) = -10.250 BETA( 3 ) = -5.920

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.0000 -.4521 -.4547 -.4584  
45.0000 -.4482 -.4547 -.4642  
90.0000 -.4458 -.4568 -.4679  
135.0000 -.4518 -.4579 -.4668  
180.0000 -.4474 -.4558 -.4555  
225.0000 -.4495 -.4492 -.4477

DATE 06 JAN 75

TABULATED PRESSURE DATA - 1A14A - VOL. 9

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ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

(RB1X33)

ALPHA( 1 ) = -10.250 BETA( 3 ) = -5.920

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

270.000 -.4490 -.4568 -.4254  
315.000 -.4532 -.4671 -.4466

ALPHA( 1 ) = -10.240 BETA( 4 ) = -3.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000 -.4525 -.4517 -.4559  
45.000 -.4493 -.4567 -.4680  
90.000 -.4499 -.4562 -.4698  
135.000 -.4462 -.4543 -.4585  
180.000 -.4472 -.4517 -.4494  
225.000 -.4464 -.4543 -.4538  
270.000 -.4489 -.4625 -.4765  
315.000 -.4509 -.4743 -.4677

ALPHA( 1 ) = -10.250 BETA( 5 ) = -1.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000 -.4511 -.4525 -.4556  
45.000 -.4530 -.4533 -.4678  
90.000 -.4456 -.4551 -.4707  
135.000 -.4453 -.4514 -.4617  
180.000 -.4496 -.4517 -.4467  
225.000 -.4475 -.4551 -.4591  
270.000 -.4475 -.4585 -.4392  
315.000 -.4522 -.4635 -.4659

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RB1X33)

ARC11-716 1A14 01+112+512K25+AT10 SRM NOZZLE

ALPHA( 1 ) = -10.16 BETA( 6 ) = .020

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.4159 -.4196 -.4242  
45.000 -.4172 -.4275 -.4366  
90.000 -.4154 -.4271 -.4472  
135.000 -.4170 -.4227 -.4335  
180.000 -.4215 -.4195 -.4174  
225.000 -.4162 -.4321 -.4260  
270.000 -.4172 -.4290 -.4242  
315.000 -.4162 -.4232 -.4274

ALPHA( 1 ) = -10.160 BETA( 7 ) = 2.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.3924 -.3998 -.4040  
45.000 -.3943 -.3982 -.4000  
90.000 -.3953 -.4027 -.4216  
135.000 -.3974 -.4000 -.4061  
180.000 -.3945 -.4019 -.3975  
225.000 -.3929 -.4140 -.3833  
270.000 -.3935 -.4056 -.3161  
315.000 -.3971 -.4006 -.3998

ALPHA( 1 ) = -10.220 BETA( 8 ) = 4.080

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.3651 -.3753 -.3905  
45.000 -.3614 -.3688 -.3836  
90.000 -.3595 -.3618 -.3697  
135.000 -.3574 -.3618 -.3678  
180.000 -.3580 -.3623 -.3569  
225.000 -.3611 -.3731 -.3553  
270.000 -.3651 -.3839 -.3438  
315.000 -.3751 -.3778 -.3712

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

(RB1X33)

ALPHA(1) = -10.230 BETA(9) = 6.080

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.3497	-.3592	-.3748
45.000	-.3447	-.3595	-.3627
90.000	-.3531	-.3538	-.3630
135.000	-.3526	-.3499	-.3517
180.000	-.3474	-.3478	-.3471
225.000	-.3437	-.3517	-.3248
270.000	-.3908	-.3619	-.3529
315.000	-.3595	-.3606	-.3547

ALPHA(1) = -10.230 BETA(10) = 8.120

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.3453	-.3552	-.3665
45.000	-.3408	-.3584	-.3749
90.000	-.3555	-.3610	-.3694
135.000	-.3639	-.3592	-.3607
180.000	-.3560	-.3579	-.3575
225.000	-.3518	-.3613	-.3248
270.000	-.3479	-.3537	-.3575
315.000	-.3505	-.3513	-.3476

ALPHA(1) = -10.240 BETA(11) = 10.110

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.3296	-.3417	-.3588
45.000	-.3351	-.3496	-.3638
90.000	-.3470	-.3554	-.3639
135.000	-.3606	-.3533	-.3548
180.000	-.3543	-.3493	-.3528
225.000	-.3457	-.3483	-.3118
270.000	-.3401	-.3422	-.3411
315.000	-.3351	-.3370	-.3316

DATE OF JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 ON-T112+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA( 2 ) = -0.220 BETA( 1 ) = -9.940

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4236	-.4341	-.4375
45.000	-.4231	-.4294	-.4404
90.000	-.4233	-.4252	-.4409
135.000	-.4223	-.4244	-.4336
180.000	-.4231	-.4244	-.4237
225.000	-.4223	-.4247	-.4242
270.000	-.4223	-.4310	-.3314
315.000	-.4226	-.4480	-.4150

ALPHA( 2 ) = -0.240 BETA( 2 ) = -7.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4529	-.4626	-.4621
45.000	-.4518	-.4576	-.4697
90.000	-.4482	-.4566	-.4658
135.000	-.4508	-.4558	-.4663
180.000	-.4518	-.4542	-.4555
225.000	-.4521	-.4534	-.4532
270.000	-.4495	-.4566	-.4472
315.000	-.4563	-.4687	-.4539

ALPHA( 2 ) = -0.240 BETA( 3 ) = -5.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4547	-.4624	-.4645
45.000	-.4550	-.4637	-.4700
90.000	-.4539	-.4635	-.4695
135.000	-.4553	-.4579	-.4705
180.000	-.4547	-.4566	-.4578
225.000	-.4547	-.4571	-.4531
270.000	-.4545	-.4653	-.4537
315.000	-.4575	-.4696	-.4549

ARC11-716 IA14 01+T12+S12N23+AT10 SRM NOZZLE

(R81X33)

ALPHA( 2) = -8.290 BETA( 4) = -3.980

## SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4458	-.4563	-.4608
45.000	-.4942	-.4587	-.4671
90.000	-.4534	-.4576	-.4713
135.000	-.4526	-.4574	-.4650
180.000	-.4529	-.4555	-.4517
225.000	-.4545	-.4584	-.4546
270.000	-.4539	-.4660	-.3899
315.000	-.4553	-.4700	-.4739

ALPHA( 2) = -8.290 BETA( 5) = -1.990

## SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4408	-.4434	-.4500
45.000	-.4405	-.4452	-.4610
90.000	-.4395	-.4463	-.4636
135.000	-.4404	-.4442	-.4542
180.000	-.4410	-.4405	-.4429
225.000	-.4410	-.4439	-.4472
270.000	-.4426	-.4513	-.3419
315.000	-.4442	-.4487	-.4570

ALPHA( 2) = -8.290 BETA( 6) = .010

## SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PHI

.000	-.4098	-.4152	-.4203
45.000	-.4130	-.4212	-.4334
90.000	-.4114	-.4224	-.4382
135.000	-.4146	-.4194	-.4271
180.000	-.4140	-.4192	-.4157
225.000	-.4122	-.4200	-.4215
270.000	-.4140	-.4250	-.3076
315.000	-.4151	-.4182	-.4197

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01X33)

ARC11-716 1A14 0X+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 2 ) = -0.230 BETA( 7 ) = 2.020

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

CHI	CP
.000	-.3874
.000	-.3956
.000	-.4014
45.000	-.3929
45.000	-.3964
45.000	-.4022
90.000	-.3919
90.000	-.4022
90.000	-.4201
135.000	-.3935
135.000	-.3985
135.000	-.4040
180.000	-.3940
180.000	-.3961
180.000	-.3974
225.000	-.3911
225.000	-.4103
225.000	-.3933
270.000	-.3913
270.000	-.4022
270.000	-.3909
315.000	-.3913
315.000	-.4019
315.000	-.3990

ALPHA( 2 ) = -0.230 BETA( 8 ) = 4.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

CHI	CP
.000	-.3366
.000	-.3405
.000	-.3578
45.000	-.3369
45.000	-.3456
45.000	-.3557
90.000	-.3366
90.000	-.3399
90.000	-.3449
135.000	-.3377
135.000	-.3378
135.000	-.3396
180.000	-.3327
180.000	-.3412
180.000	-.3389
225.000	-.3332
225.000	-.3381
225.000	-.2695
270.000	-.3387
270.000	-.3336
270.000	-.3334
315.000	-.3442
315.000	-.3439
315.000	-.3407

ALPHA( 2 ) = -0.220 BETA( 9 ) = 6.050

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

CHI	CP
.000	-.3209
.000	-.3317
.000	-.3485
45.000	-.3154
45.000	-.3328
45.000	-.3464
90.000	-.3304
90.000	-.3309
90.000	-.3354
135.000	-.3322
135.000	-.3249
135.000	-.3275
180.000	-.3220
180.000	-.3259
180.000	-.3273
225.000	-.3202
225.000	-.3212
225.000	-.2836
270.000	-.3196
270.000	-.3226
270.000	-.3226
315.000	-.3279
315.000	-.3213



(R81X33)

ARC11-716 1A14 01+112+S12M25+AT10 SRM NOZZLE

ALPHA( 2 ) = -8.220 BETA( 10 ) = 8.100

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.3156	-.3240	-.3361
45.00%	-.3190	-.3279	-.3397
90.000	-.3274	-.3324	-.3364
135.000	-.3379	-.3321	-.3305
180.000	-.3329	-.3297	-.3299
225.000	-.3226	-.3258	-.3017
270.000	-.3200	-.3200	-.3163
315.000	-.3171	-.3161	-.3119

ALPHA( 2 ) = -8.220 BETA( 11 ) = 10.130

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.3236	-.3354	-.3478
45.000	-.3275	-.3428	-.3573
90.000	-.3373	-.3491	-.3541
135.000	-.3515	-.3470	-.3468
180.000	-.3444	-.3420	-.3418
225.000	-.3354	-.3407	-.3090
270.000	-.3339	-.3323	-.3334
315.000	-.3265	-.3285	-.3229

ALPHA( 3 ) = -6.280 BETA( 1 ) = -9.970

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L S .9480 .9790 .9930

PHI

.000	-.4351	-.4403	-.4345
45.000	-.4259	-.4351	-.4498
90.000	-.4274	-.4298	-.4453
135.000	-.4314	-.4265	-.4356
180.000	-.4290	-.4303	-.4288
225.000	-.4287	-.4298	-.4288
270.000	-.4298	-.4398	-.3310
315.000	-.4340	-.4382	-.4530

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
ARC11-716 1A14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA( 3 ) = -6.280 BETA( 2 ) = -7.990

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS .9480 .9790 .9930

PMI  
.000 -.4138 -.4215 -.4135  
45.000 -.4127 -.4141 -.4273  
90.000 -.4080 -.4111 -.4278  
135.000 -.4064 -.4119 -.4209  
180.000 -.4096 -.4104 -.4083  
225.000 -.4080 -.4162 -.4139  
270.000 -.4064 -.4090 -.2834  
315.000 -.4122 -.4373 -.4260

ALPHA( 3 ) = -6.300 BETA( 3 ) = -6.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS .9480 .9790 .9930

PMI  
.000 -.4017 -.4038 -.4038  
45.000 -.4020 -.4030 -.4176  
90.000 -.4025 -.4057 -.4208  
135.000 -.4012 -.4049 -.4134  
180.000 -.4012 -.4017 -.3968  
225.000 -.4015 -.4192 -.4226  
270.000 -.4012 -.3872 -.2329  
315.000 -.4034 -.4334 -.4245

ALPHA( 3 ) = -6.280 BETA( 4 ) = -3.980

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS .9480 .9790 .9930

PMI  
.000 -.4509 -.4493 -.4578  
45.000 -.4490 -.4509 -.4609  
90.000 -.4493 -.4501 -.4599  
135.000 -.4498 -.4482 -.4578  
180.000 -.4482 -.4459 -.4476  
225.000 -.4493 -.4461 -.4536  
270.000 -.4488 -.4614 -.3578  
315.000 -.4482 -.4641 -.4676

ARC11-716 1A14 OR-TIP-S12M25-AT10 SRM NOZZLE

(RB1X33)

ALPHA( 3) = -6.180 BETA( 5) = .030

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L5 .9480 .9790 .9930

PMI

.000	-.4088	-.4101	-.4134
45.000	-.4056	-.4101	-.4236
90.000	-.4040	-.4096	-.4283
135.000	-.4096	-.4114	-.4188
180.000	-.4075	-.4090	-.4066
225.000	-.4088	-.4085	-.4116
270.000	-.4080	-.4212	-.3173
315.000	-.4082	-.4148	-.4163

ALPHA( 3) = -6.320 BETA( 6) = 2.000

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L5 .9480 .9790 .9930

PMI

.000	-.3956	-.4017	-.4051
45.000	-.3996	-.4038	-.4085
90.000	-.3969	-.4033	-.4215
135.000	-.3996	-.4035	-.4141
180.000	-.4017	-.4035	-.3984
225.000	-.3964	-.4146	-.4061
270.000	-.3975	-.4115	-.3108
315.000	-.3990	-.4051	-.4069

ALPHA( 3) = -6.330 BETA( 7) = 4.070

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L5 .9480 .9790 .9930

PMI

.000	-.3724	-.3798	-.3828
45.000	-.3724	-.3732	-.3796
90.000	-.3688	-.3727	-.3825
135.000	-.3681	-.3730	-.3778
180.000	-.3681	-.3724	-.3702
225.000	-.3681	-.3754	-.3681
270.000	-.3725	-.3617	-.3699
315.000	-.3737	-.3754	-.3752

DATE 06 JAN 75 TABULATED PRESSURE DATA - IAI4A - VOL. 9

(R01X33)

ARC11-716 IAI4 OT+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 3 ) = -6.360 BETAD ( 8 ) = 5.050

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PM1  
.000 -.3247 -.3351 -.3527  
45.000 -.3207 -.3372 -.3527  
90.000 -.3316 -.3335 -.3410  
135.000 -.3348 -.3304 -.3341  
180.000 -.3268 -.3320 -.3250  
225.000 -.3234 -.3266 -.3118  
270.000 -.3250 -.3259 -.3216  
315.000 -.3329 -.3272 -.3245

ALPHA( 3 ) = -6.270 BETAD ( 9 ) = 6.100

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PM1  
.000 -.3158 -.3273 -.3368  
45.000 -.3156 -.3294 -.3416  
90.000 -.3246 -.3344 -.3395  
135.000 -.3393 -.3310 -.3289  
180.000 -.3371 -.3334 -.3275  
225.000 -.3249 -.3267 -.3038  
270.000 -.3204 -.3175 -.3151  
315.000 -.3153 -.3183 -.3150

ALPHA( 3 ) = -6.260 BETAD ( 10 ) = 10.090

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L3 .9480 .9790 .9930

PM1  
.000 -.3199 -.3265 -.3408  
45.000 -.3234 -.3359 -.3554  
90.000 -.3271 -.3416 -.3462  
135.000 -.3451 -.3392 -.3398  
180.000 -.3430 -.3391 -.3350  
225.000 -.3347 -.3400 -.3040  
270.000 -.3312 -.3301 -.3207  
315.000 -.3234 -.3265 -.3191

(R81X33)

ARC11-716 1A14 OR-712-512N23-AT1D SRM NOZZLE

ALPHA (1) = -4.200 BETA (1) = -9.980

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L = .9400 .9790 .9930

Wt			
.000	-.4329	-.4415	-.4439
45.000	-.4273	-.4351	-.4471
90.000	-.4237	-.4332	-.4426
135.000	-.4243	-.4297	-.4378
180.000	-.4243	-.4267	-.4264
225.000	-.4294	-.4310	-.4258
270.000	-.4351	-.4477	-.4398
315.000	-.4426	-.4560	-.4597

ALPHA (2) = -4.230 BETA (2) = -7.990

SECTION (2) SRM NOZZLE DEPENDENT VARIABLE CP

X/L = .9400 .9790 .9930

Wt			
.000	-.4146	-.4227	-.4168
45.000	-.4125	-.4170	-.4320
90.000	-.4119	-.4133	-.4237
135.000	-.4119	-.4098	-.4178
180.000	-.4119	-.4114	-.4103
225.000	-.4117	-.4093	-.4189
270.000	-.4114	-.4176	-.4242
315.000	-.4141	-.4406	-.4405

ALPHA (3) = -4.180 BETA (3) = -5.970

SECTION (3) SRM NOZZLE DEPENDENT VARIABLE CP

X/L = .9400 .9790 .9930

Wt			
.000	-.3843	-.4019	-.3944
45.000	-.3840	-.3968	-.4110
90.000	-.3869	-.3963	-.4107
135.000	-.3888	-.3939	-.3998
180.000	-.3917	-.3923	-.3947
225.000	-.3891	-.3982	-.4120
270.000	-.3931	-.3941	-.4236
315.000	-.3934	-.4217	-.4219



DATE 06 JAN 75 TABULATED PRESSURE DATA - IAT44 - VOL. 9  
 ARC11-716 IAT14 JAT12+S12125+ATIO SPN NOZZLE (RB1X33)

ALPHA ( 4 ) = -4.130 BETA ( 4 ) = -3.950

SECTION ( 1 ) SPN NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
 .000 -.4308 -.4429 -.4315  
 45.000 -.4379 -.4424 -.4515  
 90.000 -.4336 -.4405 -.4512  
 135.000 -.4335 -.4384 -.4464  
 180.000 -.4330 -.4381 -.4362  
 225.000 -.4365 -.4384 -.4365  
 270.000 -.4395 -.4394 -.3831  
 315.000 -.4459 -.4450 -.4547

ALPHA ( 5 ) = -4.130 BETA ( 5 ) = -2.020

SECTION ( 1 ) SPN NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
 .000 -.4263 -.4343 -.4399  
 45.000 -.4263 -.4327 -.4426  
 90.000 -.4289 -.4295 -.4389  
 135.000 -.4271 -.4298 -.4359  
 180.000 -.4266 -.4303 -.4264  
 225.000 -.4314 -.4287 -.4269  
 270.000 -.4327 -.4389 -.3716  
 315.000 -.4335 -.4389 -.4400

ALPHA ( 6 ) = -4.080 BETA ( 6 ) = -3.310

SECTION ( 1 ) SPN NOZZLE DEPENDENT VARIABLE CP

K/L 9.480 9.790 9.930

PHI  
 .000 -.4013 -.4105 -.4174  
 45.000 -.4013 -.4142 -.4235  
 90.000 -.4032 -.4102 -.4235  
 135.000 -.4135 -.4091 -.4155  
 180.000 -.4028 -.4064 -.4035  
 225.000 -.4051 -.4072 -.4094  
 270.000 -.4051 -.4102 -.4249  
 315.000 -.4080 -.4134 -.4129

DATE 06 JAN 75

TABULATED PRESSURE DATA - IA14A - VOL. 9

PAGE 5:34

(RB1X33)

ARC11-716 IA14 01+712+S12N25+AT10 SRM NOZZLE

ALPHA( 4) = -4.210 BETA( 7) = 2.110

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.4021	-.4048	-.4096
45.000	-.4021	-.4075	-.4207
90.000	-.4024	-.4107	-.4231
135.000	-.4018	-.4049	-.4153
180.000	-.4008	-.4064	-.4046
225.000	-.4040	-.4169	-.4113
270.000	-.4021	-.4169	-.3295
315.000	-.4067	-.4086	-.4070

ALPHA( 4) = -4.200 BETA( 8) = 4.090

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.3738	-.3953	-.3936
45.000	-.3775	-.3924	-.3896
90.000	-.3762	-.3821	-.3907
135.000	-.3775	-.3794	-.3877
180.000	-.3799	-.3775	-.3724
225.000	-.3789	-.3848	-.3762
270.000	-.3799	-.3864	-.3756
315.000	-.3829	-.3893	-.3847

ALPHA( 4) = -4.210 BETA( 9) = 6.060

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000	-.3481	-.3680	-.3748
45.000	-.3543	-.3664	-.3820
90.000	-.3546	-.3611	-.3777
135.000	-.3572	-.3563	-.3622
180.000	-.3570	-.3563	-.3534
225.000	-.3551	-.3550	-.3526
270.000	-.3559	-.3603	-.3590
315.000	-.3618	-.3614	-.3619

DATE 08 JAN 72 TABULATED PRESSURE DATA - IAI14A - VOL. 9

(R81X33)

ARC11-715 IAI4 D1+T12+S12M25+AT10 SRW NOZZLE

ALPHA( 4 ) = -4.200 BETA( 10 ) = 8.090

SECTION ( 1 ) SRW NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.3164	-.3212	-.3338
45.000	-.3166	-.3282	-.3461
90.000	-.3233	-.3338	-.3421
135.000	-.3335	-.3290	-.3316
180.000	-.3357	-.3300	-.3279
225.000	-.3247	-.3322	-.3129
270.000	-.3233	-.3220	-.3217
315.000	-.3199	-.3199	-.3121

ALPHA( 4 ) = -4.180 BETA( 11 ) = 10.090

SECTION ( 1 ) SRW NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.3216	-.3256	-.3315
45.000	-.3224	-.3307	-.3483
90.000	-.3224	-.3352	-.3505
135.000	-.3344	-.3363	-.3397
180.000	-.3398	-.3328	-.3319
225.000	-.3355	-.3430	-.3098
270.000	-.3307	-.3278	-.3343
315.000	-.3214	-.3239	-.3204

ALPHA( 5 ) = -4.080 BETA( 1 ) = -10.040

SECTION ( 1 ) SRW NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PMI			
.000	-.4243	-.4326	-.4385
45.000	-.4256	-.4302	-.4428
90.000	-.4211	-.4272	-.4358
135.000	-.4251	-.4248	-.4315
180.000	-.4255	-.4283	-.4247
225.000	-.4286	-.4278	-.4242
270.000	-.4321	-.4422	-.4351
315.000	-.4388	-.4452	-.4519



ARC11-716 IA14 O1-T12-S12N25-AT110 SRM NOZZLE

(RB1X33)

ALPHA( 5) = -2.870 BETA( 2) = -0.030

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE C<sub>p</sub>

X/L S .9480 .9790 .9930

PHI	.000	-.4066	-.4165	-.4192
45.000	-.4021	-.4154	-.4282	
90.000	-.4063	-.4114	-.4218	
135.000	-.4069	-.4071	-.4168	
180.000	-.4045	-.4071	-.4042	
225.000	-.4079	-.4071	-.4119	
270.000	-.4095	-.4176	-.4287	
315.000	-.4186	-.4331	-.4409	

ALPHA( 5) = -2.870 BETA( 3) = -5.960

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE C<sub>p</sub>

X/L S .9480 .9790 .9930

PHI	.000	-.3996	-.4111	-.4076
45.000	-.3993	-.4089	-.4228	
90.000	-.3980	-.4060	-.4175	
135.000	-.3990	-.4052	-.4127	
180.000	-.3998	-.4009	-.3990	
225.000	-.3993	-.4089	-.4174	
270.000	-.4033	-.4020	-.4240	
315.000	-.4087	-.4332	-.4320	

ALPHA( 5) = -2.880 BETA( 4) = -3.920

SECTION ( 1)SRM NOZZLE

DEPENDENT VARIABLE C<sub>p</sub>

X/L S .9480 .9790 .9930

PHI	.000	-.4280	-.4377	-.4433
45.000	-.4302	-.4328	-.4446	
90.000	-.4296	-.4377	-.4385	
135.000	-.4286	-.4312	-.4361	
180.000	-.4296	-.4302	-.4317	
225.000	-.4302	-.4312	-.4309	
270.000	-.4342	-.4443	-.43815	
315.000	-.4417	-.4492	-.4490	



DATE 09 JAN 72 TABULATED PRESSURE DATA - IAI4A - VOL. 9

(RB1X33)

ARC11-716 IAI4 OA-T12+S12K25+AT10 SRM NOZZLE

ALPHA ( 5 ) = -2.850 BETA ( 6 ) = -2.020

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 0.9480 0.9790 0.9930

PHI  
0.000 -0.4164 -0.4239 -0.4303  
45.000 -0.4194 -0.4226 -0.4330  
90.000 -0.4196 -0.4207 -0.4292  
135.000 -0.4199 -0.4196 -0.4276  
180.000 -0.4180 -0.4191 -0.4203  
225.000 -0.4196 -0.4212 -0.4205  
270.000 -0.4226 -0.4327 -0.3911  
315.000 -0.4252 -0.4311 -0.4349

ALPHA ( 5 ) = -2.850 BETA ( 6 ) = 0.020

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 0.9480 0.9790 0.9930

PHI  
0.000 -0.3984 -0.4027 -0.4083  
45.000 -0.3976 -0.4043 -0.4134  
90.000 -0.3979 -0.4022 -0.4118  
135.000 -0.3979 -0.4000 -0.4046  
180.000 -0.3974 -0.4003 -0.3986  
225.000 -0.3979 -0.4022 -0.4039  
270.000 -0.4019 -0.4129 -0.3154  
315.000 -0.3995 -0.4070 -0.4119

ALPHA ( 5 ) = -2.850 BETA ( 7 ) = 2.020

SECTION ( 1 ) SRM NOZZLE

DEPENDENT VARIABLE CP

X/L 0.9480 0.9790 0.9930

PHI  
0.000 -0.4023 -0.4069 -0.4117  
45.000 -0.4023 -0.4098 -0.4222  
90.000 -0.4023 -0.4074 -0.4206  
135.000 -0.4053 -0.4090 -0.4136  
180.000 -0.4023 -0.4045 -0.4020  
225.000 -0.4023 -0.4149 -0.4100  
270.000 -0.4050 -0.4179 -0.3379  
315.000 -0.4077 -0.4077 -0.4081

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R81X33)

ARC11-716 1A14 01+112+S12N25+AT10 SRM NOZZLE

ALPHA( 5) = -2.770 BETA( 8) = 4.100

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.3631	-.3663	-.3816
45.000	-.3629	-.3661	-.3853	
90.000	-.3631	-.3646	-.3797	
135.000	-.3591	-.3624	-.3668	
180.000	-.3604	-.3614	-.3558	
225.000	-.3615	-.3721	-.3296	
270.000	-.3612	-.3783	-.3251	
315.000	-.3610	-.3662	-.3616	

ALPHA( 5) = -2.790 BETA( 9) = 6.120

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.3391	-.3412	-.3478
45.000	-.3391	-.3465	-.3618	
90.000	-.3391	-.3443	-.3610	
135.000	-.3394	-.3422	-.3465	
180.000	-.3386	-.3454	-.3373	
225.000	-.3372	-.3395	-.3257	
270.000	-.3343	-.3349	-.3206	
315.000	-.3399	-.3390	-.3314	

ALPHA( 5) = -2.790 BETA( 10) = 8.140

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	.000	-.3251	-.3256	-.3353
45.000	-.3243	-.3310	-.3452	
90.000	-.3249	-.3355	-.3467	
135.000	-.3263	-.3355	-.3361	
180.000	-.3387	-.3355	-.3305	
225.000	-.3320	-.3396	-.3193	
270.000	-.3280	-.3269	-.3271	
315.000	-.3227	-.3240	-.3169	

DATE 06 JAN 72 TABULATED PRESSURE DATA - 1A144 - VOL. 9

(R81X33)

ARC11-716 1A14 ORT12+S12M25+AT10 SRM NOZZLE

ALPHA( 5 ) = -2.770 BETA( 1 ) = 10.100

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.3341	-.3378	-.3461
45.000	-.3335	-.3416	-.3569
90.000	-.3338	-.3402	-.3558
135.000	-.3354	-.3416	-.3448
180.000	-.3416	-.3408	-.3348
225.000	-.3359	-.3456	-.3196
270.000	-.3330	-.3365	-.3346
315.000	-.3327	-.3343	-.3266

ALPHA( 6 ) = -.760 BETA( 1 ) = -10.320

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.4435	-.4497	-.4588
45.000	-.4411	-.4454	-.4593
90.000	-.4413	-.4470	-.4545
135.000	-.4424	-.4468	-.4472
180.000	-.4448	-.4419	-.4379
225.000	-.4478	-.4472	-.4401
270.000	-.4472	-.4553	-.4248
315.000	-.4494	-.4529	-.4551

ALPHA( 6 ) = -.770 BETA( 2 ) = -8.420

SECTION ( 1 ) SRM NOZZLE

X/LS .9480 .9790 .9930

PHI

.000	-.4153	-.4269	-.4355
45.000	-.4148	-.4255	-.4401
90.000	-.4177	-.4218	-.4331
135.000	-.4196	-.4195	-.4274
180.000	-.4164	-.4174	-.4155
225.000	-.4244	-.4212	-.4192
270.000	-.4196	-.4336	-.3225
315.000	-.4320	-.4392	-.4407

ARC11-716 1A14 OR+T12+S12M25+AT10 SRM NOZZLE

(RB1X33)

ALPHA( 6) = -.730 BETA( 3) = -6.290

SECTION ( 1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	CP
.000	-.4228
.005	-.4237
.010	-.4346
.015	-.4206
.020	-.4292
.025	-.4416
.030	-.4233
.035	-.4262
.040	-.4421
.045	-.4201
.050	-.4238
.055	-.4346
.060	-.4204
.065	-.4214
.070	-.4212
.075	-.4241
.080	-.4281
.085	-.4293
.090	-.4266
.095	-.4329
.100	-.4279
.105	-.4282
.110	-.4504
.115	-.4538

ALPHA( 6) = -.710 BETA( 4) = -4.140

SECTION ( 1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	CP
.000	-.4095
.005	-.4173
.010	-.4130
.015	-.4087
.020	-.4098
.025	-.4251
.030	-.4033
.035	-.4103
.040	-.4211
.045	-.4157
.050	-.4076
.055	-.4162
.060	-.4012
.065	-.4028
.070	-.4033
.075	-.4049
.080	-.4197
.085	-.4223
.090	-.4047
.095	-.4049
.100	-.4204
.105	-.4035
.110	-.4380
.115	-.4444

ALPHA( 6) = -.700 BETA( 5) = -2.080

SECTION ( 1)SRM NOZZLE  
DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI	CP
.000	-.3815
.005	-.3869
.010	-.3928
.015	-.3831
.020	-.3880
.025	-.4043
.030	-.3821
.035	-.3882
.040	-.4037
.045	-.3829
.050	-.3893
.055	-.3965
.060	-.3853
.065	-.3950
.070	-.3867
.075	-.3947
.080	-.4142
.085	-.4113
.090	-.3800
.095	-.3858
.100	-.3918
.105	-.4164
.110	-.4201
.115	-.4201

DATE 06 JAN 75 TA LATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 01-112+512N25+110 SRM NOZZLE (RB1X33)

ALPHA( 6 ) = -.700 BETA( 5 ) = .030  
 SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	9.480	9.790	9.930
PHI			
.000	-.3962	-.3981	-.4108
45.000	-.3989	-.4045	-.4149
90.000	-.3946	-.4017	-.4108
135.000	-.3962	-.4009	-.4074
180.000	-.3962	-.3977	-.3947
225.000	-.3965	-.4028	-.3979
270.000	-.3954	-.4130	-.3235
315.000	-.3975	-.4071	-.4085

ALPHA( 6 ) = -.700 BETA( 7 ) = 2.160  
 SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	9.480	9.790	9.930
PHI			
.000	-.3995	-.3938	-.4095
45.000	-.3995	-.4033	-.4162
90.000	-.4017	-.4070	-.4210
135.000	-.4017	-.4068	-.4108
180.000	-.4011	-.4046	-.3971
225.000	-.4000	-.4017	-.4019
270.000	-.3995	-.4108	-.3693
315.000	-.3992	-.4035	-.4017

ALPHA( 6 ) = -.710 BETA( 6 ) = 4.270  
 SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L	9.480	9.790	9.930
PHI			
.000	-.3852	-.3863	-.3952
45.000	-.3844	-.3927	-.4041
90.000	-.3857	-.3896	-.3909
135.000	-.3933	-.3898	-.3974
180.000	-.3871	-.3874	-.3924
225.000	-.3863	-.3880	-.3813
270.000	-.3863	-.3880	-.3802
315.000	-.3860	-.3880	-.3821

LABULATED PRESSURE DATA - 1A144 - VOL. 9

(RB1X33)

ARC11-716 1A14 ON-T12-S12N25-A110 SRM NOZZLE

ALPHA( 6 ) = -.750 BETA( 9 ) = 0.390

SECTION ( 1 ) SRM NOZZLE

K/L S .9480 .9790 .9930

PHI

.000 -.3583 -.3594 -.3676  
45.000 -.3583 -.3690 -.3791  
90.000 -.3578 -.3684 -.3791  
135.000 -.3578 -.3632 -.3714  
180.000 -.3672 -.3658 -.3591  
225.000 -.3594 -.3650 -.3565  
270.000 -.3583 -.3599 -.3551  
315.000 -.3591 -.3594 -.3549

ALPHA( 6 ) = -.750 BETA( 10 ) = 0.130

SECTION ( 1 ) SRM NOZZLE

K/L S .9480 .9790 .9930

PHI

.000 -.3526 -.3538 -.3855  
45.000 -.3514 -.3617 -.3707  
90.000 -.3537 -.3655 -.3784  
135.000 -.3551 -.3623 -.3681  
180.000 -.3665 -.3639 -.3517  
225.000 -.3612 -.3623 -.3596  
270.000 -.3564 -.3557 -.3554  
315.000 -.3543 -.3550 -.3533

ALPHA( 6 ) = -.750 BETA( 11 ) = 10.110

SECTION ( 1 ) SRM NOZZLE

K/L S .9480 .9790 .9930

PHI

.000 -.3584 -.3547 -.3658  
45.000 -.3501 -.3611 -.3823  
90.000 -.3435 -.3547 -.3701  
135.000 -.3446 -.3552 -.3632  
180.000 -.3523 -.3576 -.3506  
225.000 -.3597 -.3549 -.3440  
270.000 -.3598 -.3515 -.3530  
315.000 -.3517 -.3584 -.3498

DATE 06 JAN 75 TABULATED PRESSURE DATA - IAT14A - VOL. 9

ARC11-716 IAT14 ON T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA( 7) = 2.010 BETA( 1) = -10.080

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9750 .9930

THI	CP
.000	-.4316
.000	-.4401
.000	-.4464
45.000	-.4292
45.000	-.4419
45.000	-.4472
90.000	-.4316
90.000	-.4361
90.000	-.4462
135.000	-.4314
135.000	-.4332
135.000	-.4396
180.000	-.4314
180.000	-.4329
180.000	-.4306
225.000	-.4314
225.000	-.4353
225.000	-.4296
270.000	-.4311
270.000	-.4390
270.000	-.4309
315.000	-.4430
315.000	-.4451
315.000	-.4414

ALPHA( 7) = 2.000 BETA( 2) = -8.040

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9750 .9930

THI	CP
.000	-.4314
.000	-.4444
.000	-.4479
45.000	-.4346
45.000	-.4438
45.000	-.4500
90.000	-.4340
90.000	-.4370
90.000	-.4455
135.000	-.4314
135.000	-.4328
135.000	-.4405
180.000	-.4362
180.000	-.4352
180.000	-.4295
225.000	-.4372
225.000	-.4349
225.000	-.4358
270.000	-.4372
270.000	-.4451
270.000	-.4395
315.000	-.4452
315.000	-.4458
315.000	-.4480

ALPHA( 7) = 2.080 BETA( 3) = -6.040

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9750 .9930

THI	CP
.000	-.4199
.000	-.4276
.000	-.4377
45.000	-.4181
45.000	-.4273
45.000	-.4414
90.000	-.4223
90.000	-.4250
90.000	-.4377
135.000	-.4199
135.000	-.4250
135.000	-.4324
180.000	-.4218
180.000	-.4239
180.000	-.4248
225.000	-.4250
225.000	-.4255
225.000	-.4297
270.000	-.4228
270.000	-.4379
270.000	-.4328
315.000	-.4297
315.000	-.4424
315.000	-.4454



(RB1X33)

ARC11-71'S 1A14 OR+T12+S12H25+AT10 SRM NOZZLE

ALPHA( 7) = 1.920 BETA( 4) = -3.990

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 .9930

PMI

.000 -.4097 -.4186 -.4270  
 45.000 -.4134 -.4197 -.4328  
 90.000 -.4144 -.4199 -.4313  
 135.000 -.4134 -.4186 -.4265  
 180.000 -.4139 -.4186 -.4196  
 225.000 -.4152 -.4223 -.4280  
 270.000 -.4134 -.4286 -.4292  
 315.000 -.4186 -.4397 -.4384

ALPHA( 7) = 1.920 BETA( 5) = -2.025

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 .9930

PMI

.000 -.4068 -.4063 -.4208  
 45.000 -.4066 -.4108 -.4295  
 90.000 -.4036 -.4100 -.4248  
 135.000 -.4060 -.4084 -.4174  
 180.000 -.4032 -.4095 -.4130  
 225.000 -.4090 -.4103 -.4114  
 270.000 -.4055 -.4190 -.3903  
 315.000 -.4055 -.4134 -.4185

ALPHA( 7) = 1.920 BETA( 6) = .010

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

M/L 0.9400 0.9790 .9930

PMI

.000 -.3823 -.3841 -.3845  
 45.000 -.3815 -.3849 -.4011  
 90.000 -.3815 -.3843 -.4035  
 135.000 -.3812 -.3887 -.3977  
 180.000 -.3857 -.3864 -.3888  
 225.000 -.3849 -.3864 -.3875  
 270.000 -.3852 -.3930 -.3535  
 315.000 -.3841 -.3911 -.3941

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(R01X33)

ARC:1-716 1A14 OR+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 7) = 1.920 BETA( 7) = 2.050

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L/S .9480 .9790 .9930

PMI  
.000 -.3436 -.3436 -.3934  
45.000 -.3436 -.3436 -.3937  
90.000 -.3467 -.3473 -.4031  
135.000 -.3477 -.3526 -.4010  
180.000 -.3485 -.3539 -.3916  
225.000 -.3470 -.3494 -.3921  
270.000 -.3459 -.3902 -.3654  
315.000 -.3456 -.3478 -.3918

ALPHA( 7) = 1.900 BETA( 8) = 4.080

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L/S .9480 .9790 .9930

PMI  
.000 -.3458 -.3436 -.3921  
45.000 -.3463 -.3431 -.3945  
90.000 -.3436 -.3911 -.4025  
135.000 -.3415 -.3908 -.4026  
180.000 -.3463 -.3921 -.3959  
225.000 -.3450 -.3487 -.3465  
270.000 -.3452 -.3458 -.3796  
315.000 -.3434 -.3481 -.3423

ALPHA( 7) = 2.040 BETA( 9) = 6.080

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

K/L/S .9480 .9790 .9930

PMI  
.000 -.3759 -.3791 -.3912  
45.000 -.3762 -.3789 -.3907  
90.000 -.3805 -.3809 -.3979  
135.000 -.3781 -.3467 -.3939  
180.000 -.3831 -.3491 -.3415  
225.000 -.3412 -.3467 -.3783  
270.000 -.3765 -.3414 -.3762  
315.000 -.3759 -.3401 -.3735

(RB1433)

ARC11-716 IAI4 OR-TLE-S12M25-AT10 SRM NOZZLE

ALPHA( 7) = 2.030 BETA( 10) = 0.110

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L	.9400	.9790	.9930
PMI			
.000	-.3602	-.3732	-.3641
45.000	-.3466	-.3753	-.3645
90.000	-.3676	-.3748	-.3778
135.000	-.3697	-.3748	-.3665
180.000	-.3737	-.3794	-.3722
225.000	-.3713	-.3725	-.3482
270.000	-.3665	-.3719	-.3651
315.000	-.3721	-.3722	-.3556

ALPHA( 7) = 2.330 BETA( 11) = 10.190

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L	.9400	.9790	.9930
PMI			
.000	-.3560	-.3561	-.3803
45.000	-.3590	-.3568	-.3802
90.000	-.3441	-.3566	-.3760
135.000	-.3499	-.3568	-.3661
180.000	-.3542	-.3568	-.3552
225.000	-.3536	-.3563	-.3512
270.000	-.3483	-.3510	-.3443
315.000	-.3504	-.3571	-.3451

ALPHA( 8) = 4.300 BETA( 1) = -9.980

SECTION ( 1) SRM NOZZLE DEPENDENT VARIABLE CP

W/L	.9400	.9790	.9930
PMI			
.000	-.4227	-.4251	-.4354
45.000	-.4264	-.4259	-.4356
90.000	-.4253	-.4265	-.4341
135.000	-.4259	-.4270	-.4335
180.000	-.4251	-.4256	-.4238
225.000	-.4251	-.4251	-.4202
270.000	-.4256	-.4251	-.4223
315.000	-.4251	-.4252	-.4257



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(R01X33)

ARC11-716 1A16 Q6+T10+312485+ATTG 88M NOZZLE

ALPHA( 8 ) = 4.850 BETA( 2 ) = -8.090

SECTION ( 1 ) 8M NOZZLE DEPENDENT VARIABLE CP

K/L 8.480 8.790 8.930

PHI  
 .000 -.4262 -.4336 -.4407  
 45.000 -.4267 -.4336 -.4457  
 90.000 -.4263 -.4335 -.4446  
 135.000 -.4272 -.4328 -.4393  
 180.000 -.4299 -.4335 -.4396  
 225.000 -.4320 -.4325 -.4316  
 270.000 -.4298 -.4336 -.4263  
 315.000 -.4307 -.4337 -.4337

ALPHA( 8 ) = 4.800 BETA( 3 ) = -5.990

SECTION ( 1 ) 8M NOZZLE DEPENDENT VARIABLE CP

K/L 8.480 8.790 8.930

PHI  
 .000 -.4125 -.4208 -.4321  
 45.000 -.4161 -.4268 -.4390  
 90.000 -.4192 -.4286 -.4384  
 135.000 -.4221 -.4294 -.4363  
 180.000 -.4221 -.4282 -.4284  
 225.000 -.4225 -.4265 -.4242  
 270.000 -.4213 -.4292 -.4343  
 315.000 -.4234 -.4280 -.4326

ALPHA( 8 ) = 4.800 BETA( 4 ) = -3.970

SECTION ( 1 ) 8M NOZZLE DEPENDENT VARIABLE CP

K/L 8.480 8.790 8.930

PHI  
 .000 -.4083 -.4120 -.4222  
 45.000 -.4128 -.4190 -.4241  
 90.000 -.4109 -.4166 -.4262  
 135.000 -.4109 -.4194 -.4275  
 180.000 -.4148 -.4151 -.4207  
 225.000 -.4134 -.4162 -.4205  
 270.000 -.4107 -.4196 -.4367  
 315.000 -.4109 -.4162 -.4157

C9

(R81X33)

ARC11-716 1A14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA(O) = 4.220 BETA(O) = -2.000

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.3964 -.4069 -.4153  
 45.000 -.4027 -.4064 -.4179  
 90.000 -.4024 -.4058 -.4174  
 135.000 -.4051 -.4079 -.4214  
 180.000 -.4064 -.4084 -.4139  
 225.000 -.4069 -.4140 -.4112  
 270.000 -.4019 -.4111 -.3624  
 315.000 -.4024 -.4121 -.4076

ALPHA(P) = 4.240 BETA(P) = -.070

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.3856 -.3698 -.3992  
 45.000 -.3837 -.3898 -.3982  
 90.000 -.3829 -.3897 -.3990  
 135.000 -.3893 -.3905 -.4053  
 180.000 -.3900 -.3924 -.3940  
 225.000 -.3906 -.3931 -.3932  
 270.000 -.3903 -.3924 -.3462  
 315.000 -.3893 -.3805 -.3911

ALPHA(O) = 4.220 BETA(O) = 1.990

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI

.000 -.3829 -.3929 -.3995  
 45.000 -.3898 -.3929 -.4016  
 90.000 -.3932 -.3964 -.4064  
 135.000 -.3919 -.4011 -.4090  
 180.000 -.3950 -.3985 -.3955  
 225.000 -.3964 -.3964 -.3958  
 270.000 -.3911 -.3956 -.3772  
 315.000 -.3929 -.3958 -.3929

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(R81X33)

ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 8 ) = 4.430 BETA( 8 ) = 4.100

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.3786 -.3892 -.3916  
45.000 -.3815 -.3879 -.3979  
90.000 -.3813 -.3893 -.3945  
135.000 -.3826 -.3905 -.4008  
180.000 -.3823 -.3876 -.3880  
225.000 -.3876 -.3947 -.3893  
270.000 -.3821 -.3926 -.3543  
315.000 -.3836 -.3873 -.3768

ALPHA( 8 ) = 4.410 BETA( 9 ) = 6.060

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.3691 -.3704 -.3804  
45.000 -.3685 -.3714 -.3902  
90.000 -.3691 -.3725 -.3878  
135.000 -.3691 -.3767 -.3862  
180.000 -.3691 -.3743 -.3710  
225.000 -.3699 -.3764 -.3710  
270.000 -.3672 -.3720 -.3620  
315.000 -.3709 -.3722 -.3657

ALPHA( 8 ) = 4.410 BETA( 10 ) = 6.150

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PHI  
.000 -.3513 -.3568 -.3666  
45.000 -.3515 -.3584 -.3769  
90.000 -.3518 -.3626 -.3772  
135.000 -.3550 -.3621 -.3716  
180.000 -.3571 -.3653 -.3630  
225.000 -.3547 -.3640 -.3593  
270.000 -.3531 -.3560 -.3535  
315.000 -.3550 -.3571 -.3517

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(R81X33)

ARC11-716 1A14 01-T12+512N25+AT1D SRM NOZZLE

ALPHA( 8 ) = 4.390 BETA( 11 ) = 10.140

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3480	-.3504	-.3592
45.000	-.3480	-.3547	-.3724
90.000	-.3441	-.3581	-.3764
135.000	-.3504	-.3555	-.3706
180.000	-.3547	-.3594	-.3583
225.000	-.3549	-.3621	-.3546
270.000	-.3475	-.3529	-.3428
315.000	-.3478	-.3518	-.3404

ALPHA( 9 ) = 6.340 BETA( 1 ) = -9.960

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4176	-.4247	-.4326
45.000	-.4184	-.4279	-.4376
90.000	-.4218	-.4271	-.4368
135.000	-.4245	-.4287	-.4347
180.000	-.4229	-.4279	-.4222
225.000	-.4224	-.4245	-.4217
270.000	-.4197	-.4255	-.4224
315.000	-.4226	-.4308	-.4266

ALPHA( 9 ) = 6.390 BETA( 2 ) = -7.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4264	-.4285	-.4406
45.000	-.4287	-.4287	-.4448
90.000	-.4287	-.4327	-.4435
135.000	-.4282	-.4303	-.4366
180.000	-.4285	-.4285	-.4244
225.000	-.4277	-.4282	-.4244
270.000	-.4277	-.4285	-.4197
315.000	-.4285	-.4306	-.4307

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
ARC11-716 1A14 01+T12+S12N25+AT1D SRM NOZZLE

(R81X33)

ALPHA( 9 ) = 5.980 BETA( 3 ) = -6.000

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.4234 -.4260 -.4353  
45.000 -.4213 -.4258 -.4369  
90.000 -.4210 -.4245 -.4371  
135.000 -.4195 -.4239 -.4287  
180.000 -.4203 -.4234 -.4249  
225.000 -.4203 -.4237 -.4234  
270.000 -.4210 -.4242 -.4390  
315.000 -.4218 -.4247 -.4255

ALPHA( 9 ) = 5.980 BETA( 4 ) = -4.010

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.4137 -.4153 -.4216  
45.000 -.4121 -.4155 -.4337  
90.000 -.4113 -.4184 -.4253  
135.000 -.4124 -.4158 -.4200  
180.000 -.4126 -.4195 -.4215  
225.000 -.4153 -.4189 -.4176  
270.000 -.4132 -.4195 -.4361  
315.000 -.4142 -.4195 -.4192

ALPHA( 9 ) = 6.010 BETA( 5 ) = -2.060

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI  
.000 -.4144 -.4168 -.4200  
45.000 -.4118 -.4179 -.4297  
90.000 -.4102 -.4147 -.4237  
135.000 -.4116 -.4166 -.4234  
180.000 -.4179 -.4184 -.4228  
225.000 -.4184 -.4189 -.4181  
270.000 -.4134 -.4224 -.4371  
315.000 -.4147 -.4176 -.4160



TABULATED PRESSURE DATA - IA14A - VOL. 9

DATE 06 JAN 75

(RB1X33)

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE

ALPHA( 9 ) = 6.020 BETA( 6 ) = .050

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI

.000 -.3965 -.4005 -.4105  
45.000 -.3936 -.4026 -.4129  
90.000 -.3989 -.3984 -.4020  
135.000 -.3952 -.3992 -.4105  
180.000 -.4010 -.4055 -.4036  
225.000 -.4007 -.4013 -.3979  
270.000 -.3939 -.3997 -.3763  
315.000 -.3936 -.3999 -.3979

ALPHA( 9 ) = 6.010 BETA( 7 ) = 2.060

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI

.000 -.3998 -.4009 -.4111  
45.000 -.4001 -.4001 -.4145  
90.000 -.3969 -.4040 -.4077  
135.000 -.4017 -.4035 -.4124  
180.000 -.4022 -.4056 -.4077  
225.000 -.3996 -.4079 -.4051  
270.000 -.3998 -.4064 -.3851  
315.000 -.4001 -.4040 -.4030

ALPHA( 9 ) = 5.990 BETA( 8 ) = 4.060

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI

.000 -.3853 -.3892 -.3968  
45.000 -.3876 -.3902 -.4042  
90.000 -.3845 -.3913 -.4023  
135.000 -.3860 -.3939 -.4005  
180.000 -.3905 -.3963 -.3937  
225.000 -.3887 -.3939 -.3965  
270.000 -.3868 -.3945 -.3719  
315.000 -.3887 -.3916 -.3874



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(R81X33)

ARC11-716 IA14 OR-T12+S:2M25+AT10 SRM NOZZLE

ALPHA( 9) = 5.980 BETA( 9) = 6.090

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

CHI

.000 -.3761 -.3770 -.3669  
45.000 -.3741 -.3789 -.3936  
90.000 -.3697 -.3602 -.3907  
135.000 -.3726 -.3636 -.3697  
180.000 -.3632 -.3631 -.3604  
225.000 -.3741 -.3615 -.3799  
270.000 -.3747 -.3763 -.3704  
315.000 -.3747 -.3784 -.3731

ALPHA( 9) = 5.970 BETA( 10) = 6.180

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

CHI

.000 -.3680 -.3773 -.3637  
45.000 -.3679 -.3771 -.3930  
90.000 -.3621 -.3721 -.3602  
135.000 -.3666 -.3694 -.3631  
180.000 -.3642 -.3745 -.3745  
225.000 -.3663 -.3755 -.3716  
270.000 -.3642 -.3758 -.3664  
315.000 -.3644 -.3713 -.3674

ALPHA( 9) = 5.990 BETA( 11) = 10.160

SECTION ( 1)SRM NOZZLE

X/LS .9480 .9790 .9930

CHI

.000 -.3523 -.3636 -.3718  
45.000 -.3570 -.3660 -.3618  
90.000 -.3554 -.3644 -.3771  
135.000 -.3557 -.3668 -.3786  
180.000 -.3662 -.3669 -.3673  
225.000 -.3625 -.3702 -.3649  
270.000 -.3535 -.3617 -.3529  
315.000 -.3591 -.3641 -.3550

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

(881X33)

ARC11-716 IA14 OL+T12+S12N23+A110 SRM NOZZLE

ALPHA0(10) = 7.910 BETA0 ( 1 ) = -10.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9480	.9790	.9930
PMI			
.000	-.4096	-.4214	-.4277
45.000	-.4169	-.4224	-.4287
90.000	-.4161	-.4259	-.4358
135.000	-.4224	-.4265	-.4329
180.000	-.4256	-.4266	-.4228
225.000	-.4232	-.4248	-.4215
270.000	-.4188	-.4230	-.4160
315.000	-.4161	-.4214	-.4170

ALPHA0(10) = 7.930 BETA0 ( 2 ) = -8.030

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9480	.9790	.9930
PMI			
.000	-.4121	-.4255	-.4306
45.000	-.4211	-.4258	-.4369
90.000	-.4219	-.4314	-.4453
135.000	-.4274	-.4350	-.4368
180.000	-.4310	-.4294	-.4272
225.000	-.4282	-.4272	-.4246
270.000	-.4237	-.4262	-.4230
315.000	-.4200	-.4267	-.4238

ALPHA0(10) = 7.810 BETA0 ( 3 ) = -5.970

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/L5	.9480	.9790	.9930
PMI			
.000	-.4173	-.4226	-.4279
45.000	-.4168	-.4249	-.4408
90.000	-.4189	-.4274	-.4426
135.000	-.4218	-.4248	-.4345
180.000	-.4226	-.4230	-.4237
225.000	-.4200	-.4222	-.4245
270.000	-.4244	-.4240	-.4091
315.000	-.4194	-.4227	-.4232

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9  
 ARC11-716 1A14 01+112+512N25+AT10 SRM NOZZLE

(R81X33)

ALPHAD(10) = 7.830 BETA0 ( 4) = -4.000

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI	.000	-.4085	-.4163	-.4268
45.000	-.4163	-.4163	-.4367	
90.000	-.4145	-.4231	-.4365	
135.000	-.4156	-.4192	-.4221	
180.000	-.4166	-.4181	-.4217	
225.000	-.4182	-.4194	-.4204	
270.000	-.4148	-.4228	-.3859	
315.000	-.4158	-.4189	-.4212	

ALPHAD(10) = 7.830 BETA0 ( 5) = -2.030

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI	.000	-.4152	-.4204	-.4296
45.000	-.4155 <td>-.4215 <td>-.4368</td> <td></td> </td>	-.4215 <td>-.4368</td> <td></td>	-.4368	
90.000	-.4207 <td>-.4259 <td>-.4401</td> <td></td> </td>	-.4259 <td>-.4401</td> <td></td>	-.4401	
135.000	-.4170 <td>-.4210 <td>-.4259</td> <td></td> </td>	-.4210 <td>-.4259</td> <td></td>	-.4259	
180.000	-.4223 <td>-.4236 <td>-.4275</td> <td></td> </td>	-.4236 <td>-.4275</td> <td></td>	-.4275	
225.000	-.4223 <td>-.4231 <td>-.4246</td> <td></td> </td>	-.4231 <td>-.4246</td> <td></td>	-.4246	
270.000	-.4186 <td>-.4275 <td>-.3929</td> <td></td> </td>	-.4275 <td>-.3929</td> <td></td>	-.3929	
315.000	-.4191 <td>-.4228 <td>-.4230</td> <td></td> </td>	-.4228 <td>-.4230</td> <td></td>	-.4230	

ALPHAD(10) = 7.840 BETA0 ( 6) = .040

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

X/L5 .9480 .9790 .9930

PMI	.000	-.3967	-.4030	-.4137
45.000	-.3967 <td>-.4032 <td>-.4150</td> <td></td> </td>	-.4032 <td>-.4150</td> <td></td>	-.4150	
90.000	-.3967 <td>-.4014 <td>-.4140</td> <td></td> </td>	-.4014 <td>-.4140</td> <td></td>	-.4140	
135.000	-.3964 <td>-.4027 <td>-.4061</td> <td></td> </td>	-.4027 <td>-.4061</td> <td></td>	-.4061	
180.000	-.3962 <td>-.4040 <td>-.4021</td> <td></td> </td>	-.4040 <td>-.4021</td> <td></td>	-.4021	
225.000	-.3990 <td>-.4038 <td>-.3984</td> <td></td> </td>	-.4038 <td>-.3984</td> <td></td>	-.3984	
270.000	-.3993 <td>-.4036 <td>-.3828</td> <td></td> </td>	-.4036 <td>-.3828</td> <td></td>	-.3828	
315.000	-.4004 <td>-.4022 <td>-.4021</td> <td></td> </td>	-.4022 <td>-.4021</td> <td></td>	-.4021	

(R01X33)

DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A18A - VOL. 9  
ARC11-716 1A14 01+112+S12N25+AT10 SRM NOZZLE

ALPHA2(10) = 7.030 BETA2 ( 7) = 2.040

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS	.9400	.9790	.9930
PMI			
.000	-.3984	-.4030	-.4169
45.000	-.3971	-.4029	-.4157
90.000	-.3990	-.4056	-.4
135.000	-.3995	-.4013	-.4062
180.000	-.4013	-.4024	-.4011
225.000	-.4011	-.4016	-.3974
270.000	-.4024	-.4048	-.3974
315.000	-.4037	-.4058	-.4061

ALPHA2(10) = 7.870 BETA2 ( 8) = 4.080

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS	.9400	.9790	.9930
PMI			
.000	-.3839	-.3921	-.4031
45.000	-.3894	-.3976	-.4068
90.000	-.3871	-.3990	-.4034
135.000	-.3847	-.3980	-.4002
180.000	-.3905	-.3971	-.3966
225.000	-.3929	-.3950	-.3945
270.000	-.3905	-.3915	-.3903
315.000	-.3931	-.3934	-.3990

ALPHA2(10) = 7.970 BETA2 ( 9) = 6.180

SECTION ( 1 ) SRM NOZZLE DEPENDENT VARIABLE CP

K/LS	.9400	.9790	.9930
PMI			
.000	-.3797	-.3860	-.3963
45.000	-.3794	-.3857	-.4073
90.000	-.3771	-.3842	-.3942
135.000	-.3768	-.3855	-.3879
180.000	-.3847	-.3873	-.3838
225.000	-.3813	-.3852	-.3796
270.000	-.3789	-.3844	-.3788
315.000	-.3847	-.3860	-.3825



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(R01X33)

ARC11-716 1A14 Q1+T12+S12N25+AT10 SRM NOZZLE

ALPHA(10) = 7.980 BETA(10) = 0.110

SECTION (1) SRM NOZZLE

W/L5 .9480 .9790 .9930

PMI  
.000 -.3753 -.3627 -.3916  
45.000 -.3761 -.3621 -.4116  
90.000 -.3696 -.3756 -.3456  
135.000 -.3748 -.3774 -.3400  
180.000 -.3717 -.3751 -.3765  
225.000 -.3756 -.3737 -.3744  
270.000 -.3745 -.3756 -.3723  
315.000 -.3616 -.3793 -.3615

ALPHA(10) = 7.980 BETA(11) = 10.230

SECTION (1) SRM NOZZLE

W/L5 .9480 .9790 .9930

PMI  
.000 -.3629 -.3721 -.3674  
45.000 -.3650 -.3742 -.3979  
90.000 -.3624 -.3695 -.3622  
135.000 -.3634 -.3703 -.3737  
180.000 -.3661 -.3711 -.3747  
225.000 -.3626 -.3711 -.3682  
270.000 -.3656 -.3696 -.3687  
315.000 -.3721 -.3745 -.3729

ALPHA(11) = 9.880 BETA(1) = -9.980

SECTION (1) SRM NOZZLE

W/L5 .9480 .9790 .9930

PMI  
.000 -.4139 -.4230 -.4215  
45.000 -.4215 -.4228 -.4272  
90.000 -.4202 -.4272 -.4296  
135.000 -.4236 -.4306 -.4356  
180.000 -.4296 -.4322 -.4311  
225.000 -.4283 -.4313 -.4259  
270.000 -.4241 -.4267 -.4230  
315.000 -.4215 -.4230 -.4193

RELATED PRESSURE DATA - TATAP - VOL. 9

(N81X33)

ARC11-716 TATAP DI+T2+S12M25+AT10 SRM NOZZLE

ALPHA(11) = 9.990 BETA( 2) = -7.920

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.400 9.790 9.930

PHI  
.000 -.4180 -.4249 -.4282  
45.000 -.4202 -.4247 -.4288  
90.000 -.4268 -.4288 -.4372  
135.000 -.4285 -.4315 -.4404  
180.000 -.4337 -.4307 -.4314  
225.000 -.4336 -.4309 -.4280  
270.000 -.4275 -.4275 -.4290  
315.000 -.4234 -.4231 -.4209

ALPHA(11) = 9.940 BETA( 3) = -6.010

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.400 9.790 9.930

PHI  
.000 -.4194 -.4247 -.4320  
45.000 -.4249 -.4247 -.4391  
90.000 -.4294 -.4325 -.4467  
135.000 -.4323 -.4357 -.4448  
180.000 -.4333 -.4330 -.4319  
225.000 -.4317 -.4320 -.4314  
270.000 -.4275 -.4296 -.4259  
315.000 -.4254 -.4257 -.4259

ALPHA(11) = 9.890 BETA( 4) = -3.990

SECTION ( 1)SRM NOZZLE DEPENDENT VARIABLE CP

M/L 9.400 9.790 9.930

PHI  
.000 -.4222 -.4279 -.4399  
45.000 -.4269 -.4337 -.4494  
90.000 -.4277 -.4365 -.4530  
135.000 -.4292 -.4344 -.4591  
180.000 -.4334 -.4342 -.4328  
225.000 -.4313 -.4326 -.4328  
270.000 -.4274 -.4284 -.4179  
315.000 -.4311 -.4326 -.4315



DATE 06 JAN 75 TABULATED PRESSURE DATA - TAI4A - VOL. 9

(051X33)

ARC11-716 TAI4 01-T12-S12N3-SATIO SRW NOZZLE

ALPHA(11) = 0.900 BETA( 5) = -1.900

SECTION ( 1) SRW NOZZLE

W/L3 .9100 .9790 .9930

PHI

.000 -.4114 -.4172 -.4303  
 45.000 -.4148 -.4235 -.4369  
 90.000 -.4161 -.4245 -.4384  
 135.000 -.4168 -.4253 -.4419  
 180.000 -.4161 -.4259 -.4456  
 225.000 -.4167 -.4451 -.4451  
 270.000 -.4151 -.4299 -.4083  
 315.000 -.4186 -.4209 -.4182

ALPHA(11) = 0.910 BETA( 6) = .020

SECTION ( 1) SRW NOZZLE

W/L3 .9400 .9790 .9930

PHI

.000 -.3929 -.4031 -.4117  
 45.000 -.3949 -.4031 -.4133  
 90.000 -.3934 -.4034 -.4078  
 135.000 -.3968 -.3963 -.4007  
 180.000 -.3963 -.3968 -.3946  
 225.000 -.3963 -.3957 -.3943  
 270.000 -.3976 -.4012 -.3928  
 315.000 -.4034 -.4046 -.4008

ALPHA(11) = 0.900 BETA( 7) = 2.040

SECTION ( 1) SRW NOZZLE

W/L3 .9400 .9790 .9930

PHI

.000 -.4057 -.4068 -.4183  
 45.000 -.4047 -.4079 -.4214  
 90.000 -.4048 -.4068 -.4165  
 135.000 -.4044 -.4045 -.4088  
 180.000 -.4044 -.4039 -.4016  
 225.000 -.4044 -.4031 -.4021  
 270.000 -.4046 -.4058 -.4008  
 315.000 -.4380 -.4091 -.4099



(RB1+33)

ARC11-716 IATA 20+112+512+25+AT10 SRM NOZZLE

ALPHA(11) = 9.900 BETA( 8) = 4.190

SECTION ( 11)SRM NOZZLE DEPENDENT VARIABLE CP

M/L5 .9400 .9790 .9930

PMI

.000 -.3916 -.3955 -.4055  
 45.000 -.3916 -.3966 -.4141  
 90.000 -.3945 -.3984 -.4104  
 135.000 -.3913 -.3942 -.4018  
 180.000 -.3939 -.3913 -.3937  
 225.000 -.3921 -.3990 -.3945  
 270.000 -.3937 -.3963 -.3943  
 315.000 -.3981 -.3973 -.3926

ALPHA(11) = 9.800 BETA( 9) = 6.100

SECTION ( 11)SRM NOZZLE DEPENDENT VARIABLE CP

M/L5 .9400 .9790 .9930

PMI

.000 -.3830 -.3866 -.3929  
 45.000 -.3830 -.3898 -.4062  
 90.000 -.3832 -.3869 -.4026  
 135.000 -.3827 -.3843 -.3851  
 180.000 -.3830 -.3856 -.3823  
 225.000 -.3824 -.3819 -.3814  
 270.000 -.3798 -.3809 -.3791  
 315.000 -.3843 -.3848 -.3796

ALPHA(11) = 9.870 BETA(10) = 8.110

SECTION ( 11)SRM NOZZLE DEPENDENT VARIABLE CP

M/L5 .9400 .9790 .9930

PMI

.000 -.3828 -.3836 -.3942  
 45.000 -.3773 -.3842 -.4084  
 90.000 -.3731 -.3855 -.4030  
 135.000 -.3770 -.3774 -.3819  
 180.000 -.3734 -.3792 -.3714  
 225.000 -.3718 -.3769 -.3728  
 270.000 -.3773 -.3803 -.3738  
 315.000 -.3818 -.3855 -.3804



DATE 06 JAN 75 TABULATED PRESSURE DATA - 1A14A - VOL. 9

(RBI X33)

ARC11-71E 1A14 01-112+512N25+AT10 SRM NOZZLE

ALPHA(11) = 10.000 BETA(11) = 10.190

SECTION (1) SRM NOZZLE DEPENDENT VARIABLE CP

X/LS .9480 .9790 .9930

PMI			
.000	-.3773	-.3857	-.3969
45.000	-.3694	-.3870	-.4087
90.000	-.3710	-.3820	-.4003
135.000	-.3731	-.3770	-.3799
180.000	-.3726	-.3765	-.3724
225.000	-.3687	-.3768	-.3711
270.000	-.3718	-.3786	-.3708
315.000	-.3781	-.3838	-.3787